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Feasibility study, project determined not feasible at this time. Memphis District contract.

14. ABSTRACT This report documents the findings of Phase I cultural resources survey of a portion of the proposed Len Small floodway, Alexander County, Illinois. The proposed Len Small Floodway would be the Illinois portion of the larger Mississippi River and Tributaries Commerce to Birds-Point Levee project also located in Scott County, Missouri. Dogtooth Bend is a large meander loop of the Mississippi River between river miles 14 and 34 upstream from the confluence with the Ohio. During high water, such as the Flood of 1993, Mississippi River floodwaters flow across the meander neck. Southern Illinois University-Carbondale (SIU-C) conducted a survey in 1993 and the present investigation builds on that work. In 2004, 1294 acres (524 hectares) were surveyed. Survey areas were based on those for which tenant/landowner permission was obtained. A total of 78 archaeological sites and isolated finds were investigated; 46new sites were reported. Of the remaining 32 sites previously reported (most by SIU-C in 1993), 13 sites were revisited, 8 sites could not be found and apparently were destroyed by the 1993 flood, and 11 sites were inaccessible for various reasons. The contractor recommended 19 sites, including the historic period Lake Milligan Cemetery, as possibly eligible for listing on the National Register of Historic Places and these would be tested and mitigated, if appropriate, prior to construction. Forty-eight sites, including the 8 apparently destroyed in 1993, were determined ineligible. The prehistoric sties ranged from late Archaic through Mississippian period. The Mississippian components are most common and are undoubtedly related to the Dogtooth Bend Mound Center, listed on the National Register of Historic Place, which would not be impacted by the floodway. Historic period sites ranged from the late nineteenth through mid-twentieth century. The geomorphological study identified most of the study area as a Middle Holocene geomorphic surface formed 8000 to 7000 years ago.

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FINAL REPORT

ARCHAEOLOGICAL SURVEY WITHIN DESIGNATED PORTIONS OF THE PROPOSED LEN SMALL FLOODWAY IN DOGTOOTH BEND ALEXANDER COUNTY, ILLINOIS

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January 2005

ABSTRACT

At the request of the United States Army Corps of Engineers (USACE), St. Louis District, Panamerican Consultants, Inc. (PCI) of Memphis, Tennessee performed a cultural resources survey of a portion of the proposed Len Small Floodway in Alexander County, Illinois. The project was performed as part of a larger feasibility study being conducted by the USACE–St. Louis District regarding the potential construction of an overflow floodway across Dogtooth Bend. All work reported herein was conducted for the USACE, St. Louis District under the auspices of a continuing contract (Contract No. DACW66-01-D-003, Delivery Order No. 0022) between PCI and the USACE, Memphis District. A total of 55 archaeological sites were investigated during the study. Prehistoric diagnostics from the Late Archaic through Mississippi Period were identified in the recovered assemblage(s). Additionally, historic components from the late nineteenth through mid-twentieth century were also identified. A total of 18 of the sites investigated (11AX100, 11AX341, 11AX361, 11AX368, 11AX412, 11AX579, 11AX591 [as part of 11AX595] 11AX594, 11AX595, 11AX597, 11AX602, 11AX603, 11AX608 and FN2 [11AX93, 11AX385, 11AX386, 11AX388, and 11AX390]) are recommended potentially eligible for the National Register of Historic Places (NRHP). Avoidance of these sites is recommended until a formal determination of eligibility can be undertaken. A single historic cemetery within the proposed floodway, the Lake Milligan Cemetery, should also be avoided. A preliminary geomorphological study of the project area was also undertaken and resulted in the generation of data relevant to the physical and temporal development of Dogtooth Bend.

ACKNOWLEDGEMENTS

Panamerican Consultants, Inc. appreciates the opportunity to have provided the USACE, St. Louis District with these archaeological services. Mr. Jimmy McNeil, of the USACE, Memphis District, functioned as the Contracting Agent's Representative during the project. The project archaeologist at the St. Louis District was Ms. Suzanne Harris who provided direct assistance throughout the course of the project. Ms. Tamara Atchley, also from the St. Louis District, served as the project's manager. The assistance of all the individuals listed above is greatly appreciated by the authors.

The landowners and tenants in Dogtooth Bend are sincerely thanked for their cooperation during the study. Specifically we would like to thank, in alphabetical order: Mr. Darold Billings, Mr. Charles Bonifield, Mr. Forrest Ice, Mr. Robert Pecord, Mr. Robert Schwartz, and Mr. Marion Williams. Additional thanks go to Mr. Kenton Thomas and Mr. Billy McCarney.

Mike Story of Story Construction in Olive Branch provided us with heavy equipment services during the geomorphological investigations. The skill of Mr. Story and the other Story Construction operators was greatly appreciated by Drs. Cox and Hill.

At the Illinois State Museum (ISM), State Site Files Manager Mr. Nicholas Klobuchar is genuinely thanked for his assistance during the site files check prior to the commencement of fieldwork. Mr. Klobuchar also rapidly assigned trinomials for the recorded sites.

Drs. Brian Butler and Jon Muller of the Center for Archaeological Investigations at Southern Illinois State University at Carbondale are thanked for sharing their knowledge of Southern Illinois archaeology. The latter individuals were generous enough to field numerous questions by the two primary authors of this document between papers during, and a reception following, the annual Mid-south Archaeological Conference in Tunica, Mississippi earlier this year.

Panamerican personnel that contributed to the project included the following individuals: crew members Matt Ellioit, Caleb Johnson, Seth Mitchell, Nick Seaburgh, and Rick Suggs; laboratory technicians Mr, Nick Seaburgh and Ms. Jameson Richardson who processed and conducted initial analysis of the recovered assemblage; Ms. Cori Kaplan who served as the laboratory director and oversaw both the laboratory technicians and curation of the collection; Kate Gilow who provided administrative support during all phases of the project and also assisted in production of the report; and, Richard Russell who edited this document.

Trey Harrison, a professional photographer in Memphis, provided the artifact plate photographs contained herein.

Geomorphological Investigations were carried out by Drs. Randel T. Cox and Arleen A. Hill of the Department of Earth Sciences, University of Memphis. They were assisted by Dave Steiner. Additionally, Giddings Rig services were provided by the Center for Earthquake Research and Information at the University of Memphis.

TABLE OF CONTENTS

ABSTRACT i

ACKNOWLEDGEMENTS ii

LIST OF FIGURES vii

LIST OF TABLES viii

1. INTRODUCTION 1

INTRODUCTION 1
AGENCY RESPONSIBILITIES 1
PROJECT LOCATION 1
GENERAL NATURE OF THE DOGTOOTH BEND AREA 2
REPORT OUTLINE 3

2. ENVIRONMENTAL SETTING 5

FLORA AND FAUNA 5
MODERN CLIMATE 5
PALEOENVIRONMENTAL CONDITIONS 6

3. CULTURAL BACKGROUND 9

PREHISTORIC STAGE 11
Paleoindian *11*
Dalton *11*
Archaic *11*
Early Archaic *12*
Middle Archaic *12*
Late Archaic *13*
Woodland *14*
Early Woodland *15*
Middle Woodland *15*
Late Woodland *17*
Emergent Mississippian *17*
Mississippi *19*
Protohistoric *20*
HISTORIC STAGE 21
Historic Aboriginal (A.D. 1550-1835) *21*
Euro-American Period (A.D. 1673-Present) *21*
Modern Era *23*

4. FIELD AND LABORATORY METHODS 25

LITERATURE AND RECORDS SEARCH 25
ARCHAEOLOGICAL FIELD METHODOLOGY 25
ARCHAEOLOGICAL LABORATORY METHODOLOGY 26
Prehistoric Lithic Artifacts *26*
Prehistoric Ceramic Artifacts *29*
Historic Artifacts *29*
CURATION 30
GEOMORPHOLOGICAL FIELD AND ANALYTIC METHODOLOGIES 30

5. LITERATURE AND RECORDS SEARCH RESULTS 31

GLO Plat Map and Surveyor's Notes Review 31
Township 16 South—Range 1 West 32
Township 16 South—Range 2 West 34
Township 16 South—Range 3 West 35
USGS 15' Quadrangle Sheets 39
1934 USGS Thebes, MO-IL 15' Quadrangle Sheet 39
1939 USGS Thebes, MO-IL 15' Quadrangle Sheet 40
1955 USGS Thebes, MO-IL 15' Quadrangle Sheet 41
Previously Recorded Archaeological Sites in Dogtooth Bend 42
Previous Archaeological Studies Within Dogtooth Bend 42
1976 Mississippi River Shoreline Survey 42
1993 Center for Archaeological Investigations Dogtooth Bend Survey 42
1994 University of Illinois at Urbana–Champaign Emergency Levee Survey 42
1994 ITARP Miller City Road Repair Survey 43
1996 Center for Archaeological Investigations Horseshoe Lake Dredge Spoil Deposition Area Survey 43
National Register of Historic Places Listings 43
National Historic Landmarks 43

6. GEOMORPHOLOGY RESULTS 45

Introduction 45
Investigations Undertaken and Methods 45
Geomorphic Setting 45
Soil 49
Site Descriptions and Findings 49
Bonnefield site (B). 49
Williams site (W). 50
Schindler Road Cemetery site (SRC). 50
Pecord Field site (PF). 51
Schwartz Field site (SF). 51
Watson Road site (WR). 51
Forrest Ice site (FI). 52
Summary of Investigated Sites 52
Exploratory hole #1: Bonnefield property 53
Exploratory hole #2: Bonnefield property 53
Bonnefield Trench 53
Williams Trench 54
Giddings Core #1: Schendler Road Cemetery (SRC) 55
Giddings Core #2: Pecord Field (PF) 56
Giddings Core #3: Schwartz Field (SF) 57
Exploratory hole: Watson Road site (WR) 58

7. FIELD RESULTS 59

Re-Visited Sites 60
11AX100 (Field No. 43) 60
11AX341 (Field No. 83) 61
11AX361 (Field No. 19) 62
11AX368 (Field No. 8) 63
11AX375 (Field No. 3) 64
11AX376 (Field No. 4) 64
11AX412 (Field No. 18) 65
11AX93/11AX385/11AX386/11AX388/11AX390 (Field No. 2) 66
11AX562 (Field No. 1) 68

11AX563 (Field No. 5) 68
11AX564 (Field No. 6) 69
11AX565 (Field No. 7) 69
11AX566 (Field No. 9) 70
11AX567 (Field No. 10) 70
11AX568 (Field No. 11) 71
11AX569 (Field No. 12) 71
11AX570 (Field No. 13) 72
11AX571 (Field No. 14) 72
11AX572 (Field No. 15) 72
11AX573 (Field No. 16) 73
11AX574 (Field No. 17) 73
11AX575 (Field No. 20) 74
11AX576 (Field No. 21) 74
11AX577 (Field No. 22) 75
11AX578 (Field No. 23) 75
11AX579 (Field No. 24) 76
11AX580 (Field No. 40) 77
11AX581 (Field No. 41) 77
11AX582 (Field No. 42) 78
11AX583 (Field No. 52) 78
11AX584 (Field No. 53) 79
11AX585 (Field No. 54) 79
11AX586 (Field No. 55) 80
11AX587 (Field No. 56) 80
11AX588 (Field No. 57) 81
11AX589 (Field No. 58) 81
11AX590 (Field No. 59) 82
11AX591 (Field No. 60) 82
11AX592 (Field No. 61) 83
11AX593 (Field No. 62) 83
11AX594 (Field No. 63) 84
11AX595 (Field No. 64) 85
11AX596 (Field No. 65) 85
11AX597 (Field No. 66) 86
11AX598 (Field No. 67) 87
11AX599 (Field No. 68) 88
11AX600 (Field No. 69) 88
11AX601 (Field No. 70) 89
11AX602 (Field No. 71) 89
11AX603 (Field No. 72) 90
11AX604 (Field No. 78) 91
11AX605 (Field No. 79) 92
11AX606 (Field No. 80) 92
11AX607 (Field No. 81) 93
11AX608 (Field No. 82) 93

8. ANALYSIS RESULTS **95**

9. SUMMARY **109**

SURVEY COVERAGE 109
SITE DENSITY 109
IDENTIFIED CULTURAL COMPONENTS AND SETTLEMENT PATTERNING 109
Late Archaic *109*

Late Archaic to Early Woodland Transition *110*
Early Woodland *110*
Middle Woodland *111*
Terminal Middle to Late Woodland Transition *111*
Late Woodland to Mississippian *111*
Undifferentiated Prehistoric Components *112*
Historic *112*
DISPOSITION OF SITES DESIGNATED FOR REVISIT 113
MANAGEMENT CONSIDERATIONS 114
Site Eligibility Recommendations *114*
Potential for Buried Archaeological Sites within the Proposed Floodway *115*

10. REFERENCES CITED 117

APPENDIX A: SITE DATA

APPENDIX B: ARTIFACT INVENTORY

APPENDIX C: SITE FORMS

APPENDIX D: SCOPE OF WORK

APPENDIX E: SELECTED CORRESPONDENCE FROM ILLINOIS STATE PRESERVATION AGENCY

LIST OF FIGURES

Figure 1. Proposed Len Small 2
Figure 2. Chronologies for Dogtooth Bend and the Cairo Lowland 10
Figure 3. Portion of the GLO Plat Map for Township 16 South Range 1 West drawn in 1807. Survey areas are shaded in red 32
Figure 4. Portion of the GLO Plat Map for Township 16 South Range 2 West drawn in February 1826. Survey areas are shaded in red. Additional areas surveyed or previously recorded sites relocated within are shaded in yellow 34
Figure 5. Portion of the GLO Plat Map for Township 16 South Range 3 West drawn in February 1836. Survey areas are shaded in red 36
Figure 6. Portion of the 1934 USGS Thebes, MO-IL 15' quadrangle sheet showing project area 39
Figure 7. Portion of the 1939 USGS Thebes, MO-IL 15' quadrangle sheet showing project area 40
Figure 8. Portion of the 1955 USGS Thebes, MO-IL 15' quadrangle sheet showing project area 41
Figure 9. Index map of geomorphic investigation sites 46
Figure 10. Digital elevation model 48
Figure 11. Holocene terraces of study area (see Figure 9 for site names) 48
Figure 12. Log of Bonnefield site (B) trench 49
Figure 13. Log of Williams site (W) trench 50
Figure 14. Electrical conductivity survey of Watson Road site (WR) 51
Figure 15. Electrical conductivity survey of Forrest Ice site (FI) 52
Figure 16. Survey area map of the proposed Len Small Floodway 59
Figure 17. Selected Late and Terminal Archaic PP/Ks from 11AX589 95
Figure 18. Selected Late Archaic-Early Woodland PP/Ks from FN02 96
Figure 19. Selected Early Woodland PP/Ks from 11AX578 96
Figure 20. Selected Middle-Late Woodland PP/Ks 97
Figure 21. Selected Cores from multiple sites 98
Figure 22. Selected Primary Bifaces 99
Figure 23. Selected Secondary Bifaces from11AX570, 11AX341, and, FN02 99
Figure 24. Selected Tertiary from 11AX608 and 11AX100 100
Figure 25. Selected Polished Bifaces from 11AX593 100
Figure 26. Selected Adzes and Adze Preforms from 11AX600 101
Figure 27. Selected fragmented celt or axe from 11AX597 102
Figure 28. Selected Steep-edged Scrapers 103
Figure 29. Selected blade flake from FN02 103
Figure 30. Possible unfinished bannerstone from 11AX596 104
Figure 31. Selected Hammerstones 104
Figure 32. Selected Whitewares with Maker's Marks 105
Figure 33. Selected Stonewares 105
Figure 34. Selected Bottlenecks from 11AX412 106
Figure 35. Selected Jar Liners from 11AX412 107
Figure 36. Padlock from 11AX412 107

LIST OF TABLES

Table 1. Stratigraphic Unit Descriptions 53
Table 2. Stratigraphic Unit Descriptions 53
Table 3. Stratigraphic Unit Descriptions 54
Table 4. Stratigraphic Unit Descriptions 54
Table 5. Stratigraphic Unit Descriptions 55
Table 6. Stratigraphic Unit Descriptions 56
Table 7. Stratigraphic Unit Descriptions 57
Table 8. Stratigraphic Unit Descriptions 58
Table 9. Artifact Assemblage Recovered from 11AX100 60
Table 10. Artifact Assemblage Recovered from 11AX341 61
Table 11. Artifact Assemblage Recovered from 11AX361 62
Table 12. Artifact Assemblage Recovered from 11AX368 63
Table 13. Artifact Assemblage Recovered from 11AX375 64
Table 14. Artifact Assemblage Recovered from 11AX376 65
Table 15. Artifact Assemblage Recovered from 11AX412 66
Table 16. Artifact Assemblage Recovered from 11AX93/11AX385/11AX386/11AX388/11AX390 68
Table 17. Artifact Assemblage Recovered from 11AX562 68
Table 18. Artifact Assemblage Recovered from 11AX563 69
Table 19. Artifact Assemblage Recovered from 11AX564 69
Table 20. Artifact Assemblage Recovered from 11AX565 70
Table 21. Artifact Assemblage Recovered from 11AX566 70
Table 22. Artifact Assemblage Recovered from 11AX567 71
Table 23. Artifact Assemblage Recovered from 11AX568 71
Table 24. Artifact Assemblage Recovered from 11AX569 71
Table 25. Artifact Assemblage Recovered from 11AX570 72
Table 26. Artifact Assemblage Recovered from 11AX571 72
Table 27. Artifact Assemblage Recovered from 11AX572 73
Table 28. Artifact Assemblage Recovered from 11AX573 73
Table 29. Artifact Assemblage Recovered from 11AX574 74
Table 30. Artifact Assemblage Recovered from 11AX575 74
Table 31. Artifact Assemblage Recovered from 11AX576 75
Table 32. Artifact Assemblage Recovered from 11AX577 75
Table 33. Artifact Assemblage Recovered from 11AX578 76
Table 34. Artifact Assemblage Recovered from 11AX579 76
Table 35. Artifact Assemblage Recovered from 11AX580 77
Table 36. Artifact Assemblage Recovered from 11AX581 77
Table 37. Artifact Assemblage Recovered from 11AX582 78
Table 38. Artifact Assemblage Recovered from 11AX583 79
Table 39. Artifact Assemblage Recovered from 11AX584 79
Table 40. Artifact Assemblage Recovered from 11AX585 80
Table 41. Artifact Assemblage Recovered from 11AX586 80
Table 42. Artifact Assemblage Recovered from 11AX587 81
Table 43. Artifact Assemblage Recovered from 11AX588 81
Table 44. Artifact Assemblage Recovered from 11AX589 82
Table 45. Artifact Assemblage Recovered from 11AX590 82
Table 46. Artifact Assemblage Recovered from 11AX591 83
Table 47. Artifact Assemblage Recovered from 11AX592 83
Table 48. Artifact Assemblage Recovered from 11AX593 84
Table 49. Artifact Assemblage Recovered from 11AX594 84
Table 50. Artifact Assemblage Recovered from 11AX595 85

Table 51. Artifact Assemblage Recovered from 11AX596 86
Table 52. Artifact Assemblage Recovered from 11AX597 86
Table 53. Artifact Assemblage Recovered from 11AX598 87
Table 54. Artifact Assemblage Recovered from 11AX599 88
Table 55. Artifact Assemblage Recovered from 11AX600 88
Table 56. Artifact Assemblage Recovered from 11AX601 89
Table 57. Artifact Assemblage Recovered from 11AX602 90
Table 58. Artifact Assemblage Recovered from 11AX603 91
Table 59. Artifact Assemblage Recovered from 11AX604 92
Table 60. Artifact Assemblage Recovered from 11AX605 92
Table 61. Artifact Assemblage Recovered from 11AX606 93
Table 62. Artifact Assemblage Recovered from 11AX607 93
Table 63. Artifact Assemblage Recovered from 11AX608 94
Table 64. Status of Sites Slated for Revisit 113

1. INTRODUCTION

BY ERIC S. ALBERTSON

INTRODUCTION

At the request of the United States Army Corps of Engineers (Corps), St. Louis District, Panamerican Consultants, Inc. (PCI) of Memphis, Tennessee, performed a cultural resources survey of a portion of the proposed Len Small Floodway in Alexander County, Illinois. The project was performed as part of a larger feasibility study being conducted by the USACE, St. Louis District regarding the potential construction of an overflow floodway across Dogtooth Bend. All work reported herein was conducted for the USACE, St. Louis District under the auspices of a continuing contract (Contract No. DACW66-01-D-003, Delivery Order No. 0022) between PCI and the USACE, Memphis District. During the catastrophic flood of 1993, a breech at the Fayville levee caused the temporary activation of a natural floodway across a low-lying area of Dogtooth Bend. The cultural resources portion of the feasibility study had three primary goals:

(1) Identify all undocumented cultural resources within the prescribed study area

(2) Evaluate the current disposition of 28 previously recorded sites and the effects upon them from the 1993 flood event

(3) conduct a preliminary geomorphological examination of the project area

AGENCY RESPONSIBILITIES

As an agency of the Federal government, the St. Louis District Corps has certain responsibilities concerning the protection and preservation of cultural resources within the project area. Significant cultural resources are any material remains that are eligible for inclusion in the National Register of Historic Places (NRHP). The Federal statues and responsibilities include Sections 106 and 110 of the National Historic Preservation Act of 1966, as amended; Executive Order 11593, the Advisory Councils "Protection of Historic Sites" (36 CFR Part 800), effective June 17, 1999 and amended August 5, 2004; and Section 5 of the Abandoned Shipwreck Act of 1987. All work conducted under this contract was performed in accordance with the Standards and Guidelines established in 36 CFR Part 66, Recovery of Scientific, Prehistoric, Historic, and Archaeological Data: Methods, Standards and Reporting Requirements (Federal Register, Volume 42, Number 19–Friday, January 18, 1977) and follows the SOW.

PROJECT LOCATION

Dogtooth Bend is a large, extended Mississippi River loop located approximately 21 km upstream from the Mississippi-Ohio River confluence. The bend extends along the Mississippi's left bank (descending) for approximately 35 km, or 21.5 river miles. Contained within the bend is approximately 4,000 ha (9,800 acres) of floodplain lands, largely engaged in cultivation (Figure 1).

The portion of the study area slated for archaeological survey covered approximately 540 ha (1,334-a.). The actual area surveyed was 524 ha (1,294 acres). Survey areas were selected on a right-of-entry basis obtained by the government, not a probability sample. The survey areas are located within, or abut nine sections and portions of several French Land Grants in portions of three townships. In Township 16 South–Range 1 West; the project area is located within section 30. In Township 16 South–Range 2 West; the project area is located within sections 26, 27, 30,

32, 33, 34, 35, and a portions of several land claims/grants. In Township 16 South–Range 3 West; the project area is located within section 24 and a portion of a French Land Grant.

The 28 sites designated for relocation collectively covered approximately 17 ha, and were all located in a single township (T 16 S–R 2 W). The sites to be relocated are located within Sections 26, 33, and 34. Two additional sites located in Township 17 S–Range 2 W, were also noted to possibly extend into Township 16 S to the north.

The terrain across the study area is generally level with undulating ridge and swale topography characterizing most of central portion the area. Terrace remnants also exist along the northern and southern margins of the study area. Elevations within the study area range from 96 m (315-ft.) National Geodetic Vertical Datum (NGVD) of 1929 along the Mississippi River to approximately 100.6 m (330-ft.) NGVD along the northern terrace scarp.

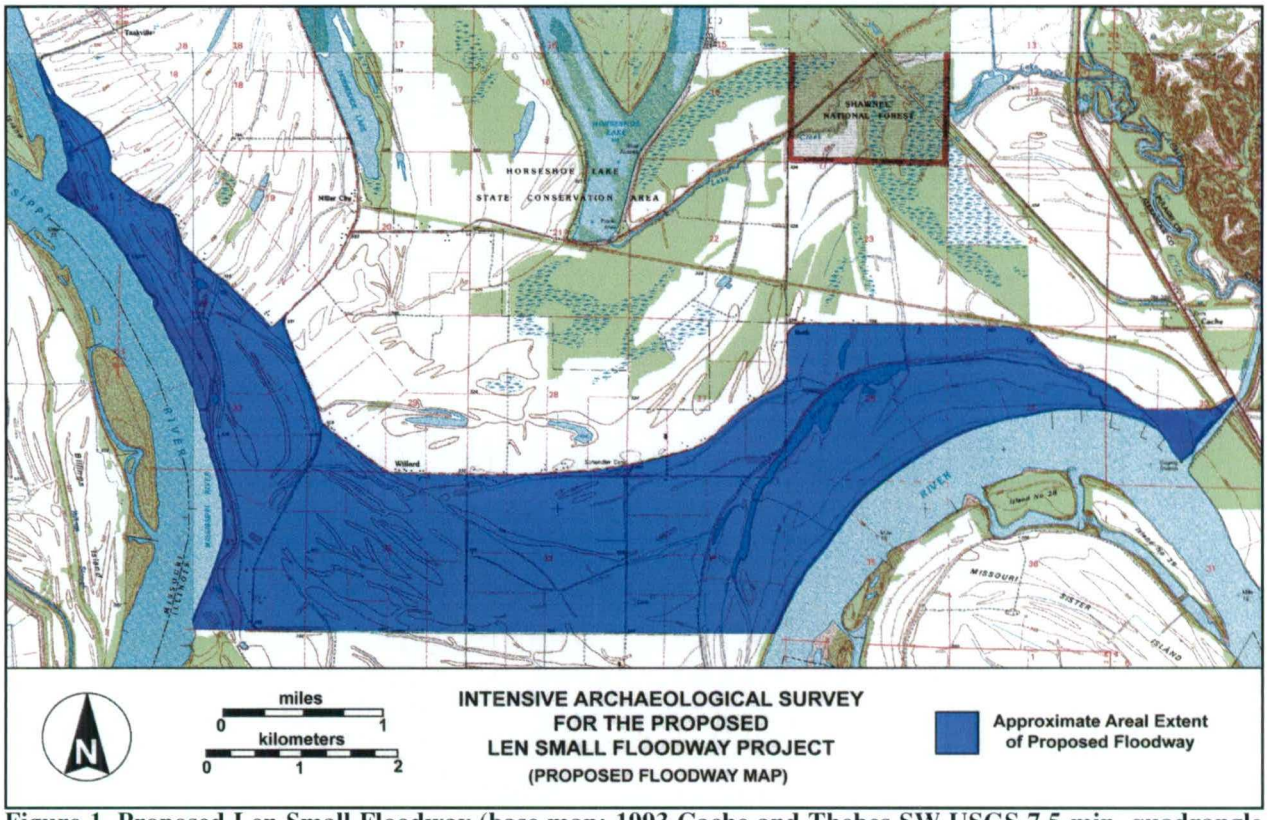


Figure 1. Proposed Len Small Floodway (base map: 1993 Cache and Thebes SW USGS 7.5-min. quadrangle sheets).

GENERAL NATURE OF THE DOGTOOTH BEND AREA

Historically, Dogtooth Bend was home to a number of small communities including Willard and Miller City. Today, little evidence of these once thriving communities remain. Modern settlement in the bend is largely dispersed, clustering around small to moderate-sized farm operations. As a result of increasingly efficient mechanized farming methods replacing tenancy, and the catastrophic flood episodes of the early to mid 1990s, most former residents of Dogtooth Bend have moved to the larger communities of nearby Cairo and Olive Branch.

During prehistoric times, the Bend was occupied from the latter part of the Middle Archaic period through the Mississippi Stage (ca. 4000 B.C. to A.D. 1500). Prehistoric occupation of the

bend culminated with construction and occupation of the Dogtooth Bend Mound Center (11AX31), a large Mississippian ceremonial and civic center located in the south-central reaches of the bend. The site is presently listed in the National Register of Historic Places and contains a large mound that has to date, escaped land leveling (Stephens 1995:1).

REPORT OUTLINE

The technical report contained herein is organized in the following manner (see also *Table of Contents*). The most salient aspects of the local environment are outlined in the next chapter. A discussion of the local and regional cultural sequence is provided in Chapter 3. Chapter 4 outlines the methods implemented during the three major phases of the study (i.e., literature and records search, fieldwork, and analysis). The results of the literature and records search including a review of previous archaeological investigations within Dogtooth Bend and a historic map review is presented in Chapter 5. Chapter 6 presents the results of the geomorphological study undertaken in the project area. Chapter 7 details the results of the archaeological survey. Detailed information on a site by site basis is provided therein. Chapter 8 consists of a review of the material assemblage recovered during the study including photographic plates depicting diagnostic artifacts. Chapter 9 presents a summary of the project findings. It includes summary data regarding site density, cultural components identified, the recovered artifact assemblage, settlement patterning, and management considerations. Additionally, all summary data are presented and compared to previous archaeological investigations (specifically, Stephens 1995) in Dogtooth Bend. References cited in the text represent the final portion of the report's main body. A series of appendices complete the document. Appendix A presents readily accessible, tabular data on each site investigated during the study. Appendix B presents a detailed list of the material assemblage recovered during the study and includes several pieces of data not provided in the bulleted lists included with the site descriptions. Appendix C presents copies of the ISM site forms for all sites recorded during the study. Included with these site form copies are also sketch maps for all of the sites investigated. The scope of work is presented as Appendix D. Selected correspondence from the Illinois Historic Preservation Agency is presented as Appendix E.

2. ENVIRONMENTAL SETTING

BY ERIC S. ALBERTSON

The following chapter describes the project area from an environmental setting viewpoint. Note that additional data relevant to this topic are provided in Chapter 6, *Geomorphology Results*. This chapter offers an in-depth treatment of the project area's physical nature including geology, geomorphology, and soil data.

FLORA AND FAUNA

The project area is located along the extreme northern reaches of the Mississippi Alluvial Plain Section of the Southeastern Evergreen Forest Region as described by Braun (1974:280). Braun (1974:291) describes three bottomland forest subdivisions in this region: swamp forest, hardwood bottoms, and ridge bottoms.

Swamp forests include those areas normally in standing water year-round. Cypress and Tupelo Gum represent the dominant species in the swamp forest subdivision. Hardwood bottoms, although subject to seasonal overflow, support a number of tree species. The dominant species include Sweet Gum, Red Maple, Swamp Chestnut Oak, Swamp Red Oak, Shingle Oak, Overcup Oak, Willow Oak, Elm, Sassafras, Hackberry, etc. Ridge bottom forests are dominated by Oaks and Hickories and are normally only subjected to short-term inundation during high floods. Along the stream banks of this region, black willow, hackberry, pecan, poplar, and sycamore dominate (Braun 1974:291-295).

Surveyor's notes taken during the early-nineteenth century, when the Dogtooth Bend area was initially subdivided into townships, support Braun's (1974) forest composition assessments. Transcriptions of several sections of the surveyor's notes are presented later in the report (see *Literature and Records Search Results* chapter). Review of the note transcriptions reveals mention of the following arboreal species used as witness trees: Ash (White); Beech; Elm; Gum; Hackberry; Hickory; Ironwood; Maple; Oak (both black and white); Poplar; Sassafras; and Sycamore. Timber described for mile sections of the survey primarily refer to species of Oak, Ash, and Gum. Extensive areas are marked on the GLO plats, which were drawn from the original notes, as "Cypress Swamps." Such areas are often commonly labeled as "inaccessible" attesting to their size.

Faunal species occupying Bottomland forest community traditionally included large mammals such as the white-tailed deer and black bear; smaller mammals such as opossum, raccoon, rabbit, beaver, otter, and squirrel; and large terrestrial birds including wild turkey. Migratory waterfowl such as ducks and geese undoubtedly also frequented this community on a seasonal basis. Riverine and slough species within this community would have included fish species such as bass, catfish, sunfish, drum, and gar. All the faunal species described immediately above would have offered important subsistence resources for humans occupying the area during prehistoric times.

MODERN CLIMATE

Based on climatological data from the past 50 years, the Alexander County climate can be characterized by relatively moderate summers and cool winters. The average annual precipitation measures 48.4-in. (122.9 cm), 9.4-in. (23.9 cm) of which falls as snow. By month, precipitation ranges from an average low of 3.2-in. (8.1 cm) in October to a high of 5.2-in. (13.2 cm) in May. The average annual temperature in Alexander County is 58.9° F (14.9° C). The

warmest month of the year is July with an average high temperature of 89.7° F (32.1° C) and average low of 71.3° F (21.8° C). The coolest month of the year is January, when the average high temperature is only 41.6° F (5.3° C) and the low is 26.5° F (-3.1° C) (Data provided by the Illinois State Climatologist's Office, a part of the Illinois State Water Survey accessed at www.sws.uiuc.edu/atmos/statecli).

PALEOENVIRONMENTAL CONDITIONS

In characterizing the paleoenvironmental conditions present in extreme southern Illinois, correlative data from the nearby Missouri bootheel and northeastern Arkansas are used. The latter regions are closely related in terms of development and change through time to the Mississippi floodplain of Dogtooth Bend.

Paleoenvironmental conditions were substantially different in the late Pleistocene through the middle Holocene. Delcourt et al. (1999:21) list two important sites with Quaternary plant fossil records within 60 km of Dogtooth Bend; the Old Field site in the Missouri bootheel; and, Reelfoot Lake in northwest Tennessee.

Delcourt et al. (1999) have recently synthesized current data and mapped vegetation reconstruction for the Central Mississippi Valley. The discussion that follows is drawn from this summary. During the Late Wisconsin full-glacial interval (18,000 B.P.) the central Mississippi River valley was covered by boreal forest communities and a Spruce-Willow Forest was on the valley train surfaces that were fed by glacial meltwater from the Ohio River. Post-glacial warming caused jack pine population to collapse about 14,000 B.P. By 12,000 B.P. warming temperatures lead to an expansion of Oak-Hickory Forest on abandoned braided steam terraces and the Spruce-Willow Forest became more restricted as the active channel of the Ohio River shifted east.

Between 11,000 and 10,500 B.P., the Mississippi River diverted through the Thebes Gap during its final episode of glacial outwash flow (Teller 1990). At 10,000 B.P. both the Ohio and Mississippi Rivers stabilized somewhat, entering a meandering regime vs. the previous braided stream regime. Also by 10,000 B.P. "the vegetation had become temperate to warm temperate in character" (Delcourt et al. 1999:25). Sweetgum-Elm Forest and Willow-Cane Forest developed along and near the now entrenched but meandering Mississippi River, while the Oak-Hickory Forest continued to expand on abandoned braided steam terraces.

At 8000 B.P., the effects of a warm and dry interval referred to as the Hypsithermal begin to be seen in the pollen record. Drought-tolerant species expanded and the Oak-Hickory Forest that formerly covered the valley train developed into an Oak-Hickory Savannah. However along and near the Mississippi River, Sweetgum-Elm Forest and Willow-Cane Forest remained and Cypress-Tupelo Forest expanded in the backswamps.

Regionally, the Hypsithermal was most strongly felt around 6000 B.P. and the arid conditions continued until after 4000 B.P. (Delcourt et al. 1999). McNutt (1996) suggests that during 7500-5500 B.P. the strongest cultural impacts of the Hypsithermal were felt. Willow-Cane Forest and Cypress-Tupelo Forest became "confined to the easternmost portion of the Eastern Lowland along a relatively narrow meander belt" (Delcourt et al. 1999:26). Within the backswamps, mesic lowland forest probably expanded into Cypress-Tupelo Forests because of dropping water tables.

Modern floristic regions developed between 4000 B.P. and 3000 B.P. with a return to wetter conditions. The Sweetgum-Elm Forest re-expanded along drainages and Willow-Cane Forest "occupied a broadening and shifting Mississippi meander belt" (Delcourt et al. 1999:27).

Changes in the locations of Willow-Cane, Sweetgum-Elm and Cypress-Tupelo Forests became dependent on shifts in channel morphology.

In discussing the 1000 B.P. environment, Delcourt et al. (1999) note that potions of the Eastern Lowland would have been covered by Ragweed-Grass Old Field vegetation. This refers to "anthropogenically disturbed landscapes" (Delcourt et al. 1999:28), such as Native American (Mississippi period) corn fields with early secessional grassland and thickets for cover. Delcourt et al. (1999:28) state that the "paleoecological 'signature' of cultural impact is characterized by occurrence of pollen grains of cereals such as maize; weedy herbs including ragweed, chenopods, and grasses; and spores of old-field ferns, such as bracken."

3. CULTURAL BACKGROUND

BY C. ANDREW BUCHNER AND ERIC S. ALBERTSON

This chapter provides a period-by-period briefing regarding the cultural sequence at Dogtooth Bend. The prehistoric periods in southern Illinois are similar to most of the eastern United States; traditionally divided into four major periods: Paleoindian, Archaic, Woodland, and Mississippian. However, providing a clear-cut cultural sequence for the study area is a somewhat complicated task because Dogtooth Bend is located in the confluence region. Here, influence comes from three directions: up from the Lower Mississippi River, down from the Lower Ohio River and down from the American Bottom.

As a result, the cultural-historical framework in the confluence region suffers from a number of constraints. Importantly, the confluence region is a borderland that is (or was) located at the juncture of major cultural traditions (northern v. southern). This has contributed to a somewhat "mixed" artifactual record that is a reflection of this cultural overlap. For example, the southern distribution of a wide variety of artifact types, such as Etley points, is superimposed on the northern distribution of various other artifact types, such as Poverty Point Objects. Local site assemblages are often somewhat anomalous and do not fit neatly into the "pure" patterns described in adjacent regions. The confluence region remains a borderland today, as portions of three states—Illinois, Missouri, and Kentucky—are located here. The modern political boundaries have a discouraging fragmenting effect on our understanding of the region's archaeology, as state lines often arbitrarily form the boundaries of archaeological study units. For this reason, various theoretical frameworks are applied to the area, and often these merely reflect the theoretical research biases of authors.

During a previous study within Dogtooth Bend, Stephens (1995:12) remarked that "the cultural sequence in the research area relates, in most cases, to what is referred to as the Central Mississippi Valley in archaeological contexts." Archaeologists consider the Central Mississippi Valley to be the floodplain region between the mouths of the Ohio and Arkansas Rivers (McNutt 1996; Morse and Morse 1983:1). Because Dogtooth Bend is located at the northern limit of the "Gulf Coastal Plain and the Lower Mississippi Valley," it exhibits strong prehistoric cultural affinities with regions to the south rather than to the north" (Stephens 1995:12). Stephen's (1995) proposed sequence is outlined in Figure 2. In contrast, several years later Koldehoff and Wagner (2002:25) followed Griffin's (1967) sequence in the Horseshoe Lake report, as opposed to Phillip's (1970) Lower Mississippi Valley sequence, because "we are more familiar with southern Illinois sequences and associated artifacts ..."

Immediately south of the study area, various chronological frameworks have been proposed for the Cairo Lowland (Chapman 1975, 1980; Hopgood 1969b, 1970; Lafferty and Price 1996; Lewis 1972, 1990, 1996; McNutt 1996; Morse and Morse 1983; O'Brien 1994; O'Brien and Wood 1998; Phillips 1970; Price and Price 1990; J.R. Williams 1974; and S. Williams 1954) creating what Lewis (1996:75) refers to as "the southeast Missouri chronological muddle". The proposed chronology for the Cairo Lowland (Figure 2) draws on these sources, as well as information derived from recent CRM projects in the New Madrid Floodway (Brown et al. 2000a, 2000b; Buchner et al. 2003; Chapman et al. 1999; Lafferty et al. 2001; Lafferty and Hess 1996). Similar cultural-historical framework issues are apparent in western Kentucky as well (Kreisa 1998:60-64).

Previous archaeological investigations at Dogtooth Bend and the adjoining area are discussed in some detail in Chapter 5 of this report (*Literature and Records Search Results*). Dogtooth Bend

is best known for containing a National Register of Historic Places (NRHP) listed archaeological deposit, the Dogtooth Bend Mounds and Village Site (11AX31 and 11AX74).

PERIODS	CAIRO LOWLAND SEQUENCE	DOGTOOTH BEND SEQUENCE
HISTORIC	AMERICAN ERA	POST-CONTACT NATIVE AMERICAN
A.D. 1803		
	COLONIAL ERA	
A.D. 1673		
PROTOHISTORIC		
A.D. 1540		
MISSISSIPPI	Abandonment "Vacant Quater"	MISSISSIPPIAN
A.D. 1450		
	CAIRO LOWLAND PHASE	
A.D. 1000		
COLES CREEK (TERMINAL WOODLAND-EMERGENT MISSISSIPPIAN)	BECKWITH PHASE	EMERGENT MISSISSIPPIAN
A.D. 800		
BAYTOWN (LATE WOODLAND)	HOECAKE PHASE	LATE WOODLAND
A.D. 400		
MARKSVILLE (MIDDLE WOODLAND)	LA PLANT PHASE	MIDDLE WOODLAND (Hopewell/Marksville transition)
100 B.C.		
TCHULA (EARLY WOODLAND)	BURKETT PHASE	EARLY WOODLAND (early Crab Orchard)
500 B.C.		
POVERTY POINT (LATE ARCHAIC)	O'BRYAN RIDGE PHASE	LATE ARCHAIC
3,000 B.C.		
MIDDLE ARCHAIC 4,000 B.C.	Colonization	Colonization
	No evidence for occupation prior to ca. 4000 B.C.	No evidence for occupation prior to ca. 4000 B.C.
5,000 B.C.		
EARLY ARCHAIC	*Hypsithermal (7000-3000 B.C.) major impact ca. 5500-3500 B.C.*	
7,900 B.C		
PALEOINDIAN 8,500 B.C	DALTON	
	CLOVIS	
10,000 B.C		

Figure 2. Chronologies for Dogtooth Bend (after Stephens 1995) and the Cairo Lowland (after Buchner et al. 2003).

PREHISTORIC STAGE

PALEOINDIAN

Paleoindian occupations (10,000-8500 B.C.) represent the first well-accepted occurrence of humans in the Western Hemisphere. Aboriginal groups of the period were likely small, mobile bands dependent upon a hunting and gathering economy. The key distinguishing feature of material culture are fluted points (Clovis and Folsom) but other tools and points types are also diagnostic for this period.

It is improbable that the Dogtooth Bend locality will ever yield Paleoindian artifacts because this surface was laid down ca. 4000 B.C. (see *Environmental Setting* and *Geomorphic Investigations*); thus post-dating the Paleoindian period. Paleoindian occupation is also lacking the Cairo Lowland (see Chapman 1975:67, 93) for the same reason. Across the river in western Kentucky, two upland sites have produced Paleoindian points, Sassafras Ridge and McLeod Bluff (15HI1) (Rolingson 1964). This correlated well with Stephen's (1995:13) suggestion that Paleoindian people preferred terrace and bluff locations.

DALTON

The Dalton period (8500-7900 B.C.)[1] is considered transitional between the Paleoindian and Archaic traditions. The key distinguishing feature of the material culture is the unfluted, serrated Dalton point, but the Dalton tool kit includes a number of other diagnostic special-function tools and a woodworking adz (Morse 1997). Dalton lifeways were initially understood from excavations at rockshelters such as Graham Cave and Arnold Research Cave in central Missouri, and Modoc Rockshelter in Illinois (Chapman 1975:94, 234-236). Open sites types within the Dalton settlement system are best known from northeast Arkansas, where Sloan (3GE94), a cemetery, Lace (3PO17), a base settlement, and Brand (3PO139), a hunting camp have been excavated (Morse and Morse 1996:122).

Similar to the Paleoindian, it is improbable that the Dogtooth Bend locality will ever yield Dalton artifacts because this surface was laid down ca. 4000 B.C. (see *Environmental Setting* and *Geomorphic Investigations*), and thus post-dates the Dalton period. Dalton sites are reported in the uplands of southern Illinois (Gramley and Funk 1991; McNutt 1996:190). The best known of these is the Olive Branch site (11AX267), an extensive Dalton habitation locus located northwest of the study area along the Mississippi River (Gramley 2002). Across the river, three Dalton sites were identified on braided stream terrace level 2 in the western Cairo Lowland (Redfield 1971:Figure 4). Dalton points are reported from two sites in the Reelfoot Lake Basin (Mainfort 1996:80), and Dalton and Plano-like points occur on bluff tops in western Kentucky (Rolingson 1964:41-47).

ARCHAIC

The Archaic is usually thought of in terms of three subperiods—Early, Middle, and Late—that are detailed further in the following sections. Temporal divisions of the Archaic are primarily based on the occurrence of distinctive projectile points (see O'Brien and Wood 1998:109-149). Throughout Archaic times a hunter-gatherer lifeway appears to have continued, and it was focused on essentially the same flora and fauna as represented in the natural environment today. The Archaic is perceived of as a time of regional "settling in," when an efficient utilization of the environment was keyed to highly cyclical, repetitive seasonal activities continued by indigenous groups over thousands of years (cf. Caldwell 1958). Some seasonal movement to exploit econiches was probably required, but Archaic populations, compared to Paleoindian, are generally portrayed as attached to localities, river valleys, or regions.

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[1] The Dalton period is variously dated. Goodyear (1982) suggests 8500-7900 B.C. Lewis (1996:51) suggests 8500-8000 B.C. O'Brien and Wood (1998:100) suggest 8950-7900 B.C. McNutt (1996:190) suggests 8500-7000 B.C.

In the Central Mississippi Valley, virtually no Archaic sites have been excavated, and indeed, these components appear to have been overlooked by archaeologists more concerned with ceramic period adaptations (S. Williams 1991; McNutt 1996:194). Lewis (1996:51, 53) recently remarked that "The Archaic periods in the study region [confluence region] are remarkable in that almost nothing is known about them ... at least until the close of the Late Archaic period."

EARLY ARCHAIC

The Early Archaic period (7900-5000 B.C.)[2] is best understood from rockshelter excavations, such as Modoc (Fowler 1959) and Graham Cave (Chapman 1975), rather than from open habitation sites. McNutt (1996:194) has commented that during the Early Archaic "we can see several projectile points coming into the Valley from the west and north, probably in conjunction with the prairie expansion and dry econiches during the Hypsithermal" that is dated 7000-3000 B.C. The Dalton Serrated point may have developed into broad lanceolate Early Archaic forms, such as Graham Cave Fluted, dated 8,000-7,000 B.C (Chapman 1975:126). Other point forms considered diagnostic for the Early Archaic include Hardin, Hidden Valley Stemmed, Rice Lanceolate, Hardaway-Dalton, San Patrice, St. Charles-Plevna, and a variety of side notched types (Big Sandy, Graham Cave, Cache River, etc.). For northeast Arkansas, Morse and Morse (1983) proposed a series of horizon markers, which grade from classic Early Archaic Corner-Notched forms (ca. 7500-7000 B.C.) into Middle Archaic Basal Notched forms.

Again, as for the Paleoindian and Dalton, is improbable that the Dogtooth Bend locality will ever yield Early Archaic artifacts because this surface was laid down ca. 4000 B.C. (see *Environmental Setting* and *Geomorphology Results*), and thus post-dates the Early Archaic period. Across the river, little is known regarding the Early Archaic occupation of the Cairo Lowland (Lafferty and Hess 1996:I:23; Lewis 1996:53). Lewis (1996:53) cautions that the "scarcity" of sites "should not be taken as an indication of the extent to which the region was or was not used." Within the New Madrid Floodway there are three landforms of sufficient age to yield evidence of Early Archaic occupation, but to date, no Early Archaic components have been identified. In the Reelfoot Lake Basin, two Early Archaic points are reported: a Big Sandy and a Lost Lake (Mainfort 1996:80). The Early Archaic along the Mississippi River in west Kentucky is also largely *terra incognita* (Jefferies 1989:151-155).

MIDDLE ARCHAIC

The Middle Archaic period (5000-3000 B.C.) was marked by a shift in subsistence modes, apparently a response to the Hypsithermal, a hot and dry climatic interval (see *Paleoenvironmental Conditions* section, this report). This change resulted in restricted deciduous forest occurrence, limiting the availability of certain floral and faunal resources. The cultural impact of this warming trend appears to have been most strongly felt from 5500-3500 B.C. (McNutt 1996:194). Several settlement models regarding human adaptation during the climatic optimum have been posited. Upstream, in the American Bottom, Higgins (1990) proposed that the drying of the uplands forced people into the floodplains. Lafferty and Hess (1996:I:23) also suggest that the Cairo Lowland was occupied at this time because local groups were drawn to water available within the active Mississippi River meander belt. A similar trend also seems to be reflected in the Lower Tennessee/Cumberland, as populations appear to have congregated at a limited number of floodplain locations and produced deep middens (Nance 1987:96-97). In contrast, Morse and Morse (1983:111) propose that the western lowlands were largely abandoned for the uplands (Ozark Plateau and its escarpment).

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[2] The Early Archaic period is variously dated. O'Brien and Wood (1998:147) suggest 7500-5000 B.C. McNutt (1996:193) offers 7000-5500 B.C. Jefferies (1989:150) suggests 8000-6000 B.C. Others, such as Lafferty and Hess (1996:I:23), combine the Early and Middle Archaic (7500-3000 B.C.).

Dogtooth Bend appears to have been colonized by human populations during the latter portion of the Middle Archaic. Stephens (1995:160) identified three late Middle Archaic components (11AX371, 11AX373, and 11AX385) in the Len Small Floodway based on the presence of Mantanzas points. Mantanzas points are dated 3700-3000 B.C. at Koster (Cook 1976; Justice 1987:119). These three late Middle Archaic components are clustered along the remanent terrace edge on the north side of the Len Small Floodway (see *Geomorphology Results*). At Horseshoe Lake, Koldenhoff and Wagner (2002:83) report four late Middle Archaic Helton phase components. Side-notched hafted biface(s) is the diagnostic artifact. Three of these sites are located on Horseshoe Lake Island (11AX167, 11AX441, and 11AX442), and one is found along Black Creek (11AX110).

Recently recovered data suggest that the initial occupation of the New Madrid Floodway also took place during the late Middle Archaic (ca. 4000-3000 B.C.), and thus the colonization of these two regions was contemporary. Although most sites from this period are thought to have been "buried or eroded away by the ensuing wetter, modern period" (Lafferty and Hess 1996:I:23), three sites in the New Madrid Floodway are considered late Middle Archaic components. These sites (23MI630, 23NM561, and 23NM567) yielded Hickory Ridge points, and are located adjacent to ancient (Fisk stage F) meander channel that were probably lakes during the Middle Archaic (Buchner et al. 2003:50-51). Such lakes would have been especially attractive during the warm and dry late Hypsithermal climate. The late Middle Archaic settlements probably functioned as seasonal extractive sites.

Late Archaic

The Late Archaic (3000-600 B.C.) is characterized by "an astonishing proliferation" in the number of sites, cultural elaboration, and widespread exchange relations (McNutt 1996:199). The Late Archaic period has traditionally (Caldwell 1958; Fowler 1959) been viewed as a "time when human adaptation to the resource-rich eastern Woodlands biome reached its most efficient expression after many centuries of gradual adaptation and learning" (Ahler 1992:6). Settlements were specialized to exploit particular resources during specific seasons and they were occupied cyclically (seasonally) as the population shifted from dispersed to aggregated (Dye 1977; Winters 1969). In this view, the Late Archaic period ends arbitrarily with the introduction of pottery and the development of horticulture. However, modern investigations have "prompted major revisions," that are summed up by Ahler as follows:

> ...Specialized adaptation to specific regional environments occurred much earlier...at least by the Early Archaic period.
>
> ...Development of seasonal rounds of resource exploitation...probably took place as early as the Early Archaic.
>
> ...Pottery is now known to have been manufactured during the Late Archaic (Reid 1983) and a variety of native and tropical cultigens were at least partly domesticated during this period [Ahler 1992:6].

In the Central Mississippi Valley, most researchers discuss Late Archaic chronology in terms of a dual framework: "The" Late Archaic period (i.e., the early Late Archaic), dated ca. 3000-1500 B.C. followed by the "Terminal" Late Archaic (or the Poverty Point) period, dated ca. 1500-500 B.C. In this view the early Late Archaic is a pre-baked clay object part of the sequence. The subsequent Poverty Point period is considered one of three cultural "zeniths" in prehistoric Southeastern studies. In other portions of the southeast, these components are referred to as Gulf Formational (Walthall 1990), and include fiber-tempered ceramics as a diagnostic, but fiber-tempered ceramics have yet to be reported in southeast Missouri (Morse and Morse 1983:124).

Over much of the Mid-South, the Late Archaic period opens with Benton culture, but Benton material and sites are generally restricted to east of the Mississippi. Where Benton does occur,

little is known regarding the subsequent Late Archaic complexes prior to the arrival of Poverty Point (Smith 1996:102). Across the river in the Reelfoot Lake Basin, Mainfort (1996:80) reports that the pre-Poverty Point Late Archaic is not well represented (11 components), and is primarily identified by Lambert and Harris Island points. In contrast, the Late Archaic sequence in the American Bottom is well developed (McElrath et al. 1984) and shows a prairie adaptation—a Hypsithermal hangover—lasting through the Titterington phase (2300-1700 B.C.) (McNutt 1996:199).

In the Lower Mississippi Valley Poverty Point, or Terminal Late Archaic, components are distinguished by the appearance of large mounds, earthworks, baked clay objects or "Poverty Point Objects," microlithics, lapidary work, raw material trade, and specialized manufacturing sites. The Len Small Floodway is located near or at the northern limit of the distribution of baked clay objects. Baked clay objects are though to be a substitute for boiling stones needed for indirect-heat moist cooking (Sassaman 1995:228). Unfortunately, baked clay objects are not effective diagnostics because they continued to be utilized into the early Middle Woodland. A variety of stemmed projectile points are characteristic of the Late Archaic/Poverty Point period, including Burkett-Etley-Gary forms, similar to Ledbetter-Pickwick-Mulberry Creek points, and the Weems-Wade-Dyroff-McIntire forms which lead into the Early Woodland types. Morse and Morse (1983:118) suggest Big Creek points (3000-2000 B.C.) predate Burkett (2000-1000 B.C.) and Weems (1000-500 B.C.) points in Late Archaic assemblages.

Late Archaic components at Dogtooth Bend are fairly well-represented, as Stephens (1995) identified 12 components in the Len Small Floodway, Koldehoff and Wagner (2002:83) report eight Late Archaic sites, and PCI identified seven Late Archaic sites during this project. Diagnostic artifacts include Etley, Ledbetter, Saratoga Straight Stemmed, Motley, and Terminal Archaic Barbed PP/Ks. Late Archaic components are clustered on the remnant terrace edges and associated ridge systems, and suggest a radiation out from the late Middle Archaic "homeland".

The Late Archaic period in the Cairo Lowland and on Barnes Ridge is represented by the O'Bryan Ridge phase, the first widespread local cultural complex (Phillips 1970; J.R. Williams 1974; S. Williams 1954). O'Bryan Ridge phase is treated as a Poverty Point period component, a stretch of this concept according to Lewis (1996:53). The evidence suggests a logistically mobile hunter-gather population that was well-adapted to the floodplain. Importantly, chenopod cultivation took place, and wild plant exploitation was localized and diverse. O'Bryan Ridge phase sites are both large and small, and occur on older, elevated surfaces along and near ancient relic channels (F, J, 1, 2, and 3). Deep midden is present at some of the large sites, and these same sites were often continuously occupied from the Late Archaic period onwards (Buchner et al. 2003:51-56). Since 1990, a total of 15 O'Bryan Ridge phase radiocarbon dates have been reported from five sites in the New Madrid Floodway: Burkett (20MI20), Weems (23MI25), Renauld (23MI621), 23MI605 and Clifford LaPlant (23NM561) (Buchner et al. 2003:see Table 3-03).

WOODLAND

During the Woodland period, intensification in horticultural methods, construction of earthworks, elaboration of artistic expression, and burial rituals are all thought to be interrelated to the reorganization of social structure (Griffin 1967). For at least part of the year, a sedentary group was needed to plant, tend, and harvest crops. Sedentism and communal labor efforts promoted territorial circumscription. One hallmark of the Woodland period is the use of ceramics. Ceramic types and varieties thus are a primary consideration in interpreting settlement patterns and chronological progression during the Woodland period. Considerable archaeological attention has been focused on these ceramic cultures and a number of phases and phase sequences have been proposed for southeast Missouri (Lafferty and Price 1996; Lewis

1996; Phillips 1970; J.R. Williams 1974; S. Williams 1954), creating what Lewis (1996:75) refers to as "the southeast Missouri chronological muddle."

EARLY WOODLAND

Early Woodland (600-200 B.C.) components in the Central Mississippi Valley are often characterized as Tchula (Lafferty and Price 1996:3; Price 1986) following Williams' (1954:28) and Phillips' (1970:876-877) lead. However, others (Chapman 1980:18; J.R. Williams 1974:12) "do not believe that there is sufficient evidence to identify Tchula-period complexes in southeast Missouri" (Martin 1997:80). Tchula occupations are in general poorly understood across the region[3], but Early Woodland evidence may be more widespread than reported due to "misidentification" of pottery (O'Brien and Wood 1998:186). Burkett is the Tchula period phase for the Cairo Lowland (Phillips 1970:876-77; S. William 1954:28). Lewis (1996:55) remarks that beyond the addition of ceramics, Burkett phase components "appear to differ little from the task-specific camps" of the proceeding O'Bryan Ridge phase.

Early Woodland components at Dogtooth Bend are well-represented, as Stephens (1995) identified 14 components in the Len Small Floodway, Koldehoff and Wagner (2002:83) report 35 Woodland sites (but their summary does not how many of these are Early Woodland), and PCI identified two Early Woodland sites during this project. Diagnostic artifacts include Cypress Stemmed and Adena Points, as well as Kramer. No unequivocal Early Woodland ceramics are reported from Dogtooth Bend. Stephens (1995) data suggested that Early Woodland components are clustered on ridge system associated with the remnant terrace edge. This pattern has affinities to the local Late Archaic settlement pattern.

The Burkett phase is largely based on data from the Burkett (23MI20) and Weems (23MI25) sites on O'Bryan Ridge (Hopgood 1969; Williams 1968, 1974). J.R. Williams (1974:95) provides a summary of the Burkett phase traits. At Burkett, Hopgood (1969b) reported that a ceramic level overlay the O'Bryan Ridge phase level in the site's deep midden. Recent (1999) excavations by PTA at Burkett confirmed this vertical separation (Brown et al. 2000). The emerging pattern from the Cairo Lowland is that initial use of ceramics seems to lag behind that of the neighboring lowlands, by perhaps 500 years or so. During the Early Woodland period the inhabitants of the New Madrid Floodway may have simply continued to live O'Bryan Ridge phase lifeways. The earliest dated ceramic context on Barnes Ridge (23NM575 feature 6; see Lafferty and Hess [1996:IIIC:194]), reveals contemporary use of sand-, grog- and sand and grog-tempering in combination with early decorative techniques such as fabric marking, cord marking, punctation, and noding. This complex is similar to material from the Black Sand culture to the north (Martin 1997:87) and the Alexander culture to the south (Dye and Galm 1986). The concept of a Tchula period Burkett phase being the initial (Early Woodland) ceramic complex in the Cairo Lowland appears in need of re-evaluation.

MIDDLE WOODLAND

The Middle Woodland (200 B.C. to A.D. 400) period features elaborate burial ceremonialism and artistic expression, and represents the second major cultural "zenith" in the prehistoric Southeast. In the Ohio Valley, the Middle Woodland period is referred to in terms of Hopewell; in the Lower Mississippi Valley this period is characterized as Marksville; and in the Illinois and Missouri Valleys, it is referred to as Havana Hopewell.

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[3] Across the river, Lewis (1996:51) reports no Burkett phase components in the uplands of western Kentucky. In the Reelfoot Lake Basin, few Tchula components are known and there is a general "lack of Cormorant ceramics" that contrasts with findings from interior Tennessee (Mainfort 1996:81). The best documented Tchula assemblage in northeast Arkansas is from the McCarty site (3PO467) (Morse 1986:72), but its 14C date A.D. 240 (uncalibrated) is "too late", as are most of the Burkett phase dates (see below).

Arguably the most distinctive element of Middle Woodland culture is its complex funerary ceremonialism. Indeed, Brown (1979:211) has remarked that "Interest in Hopewell burial practices is as old as archaeology." Mortuary offerings associated with Middle Woodland burials are manufactured from exotic raw materials, such as galena, mica, copper, obsidian, shell and quartz (Goad 1979; Walthall et al. 1979). The presence of significant numbers of both finished goods and unfinished (stockpiles) of these extra-local raw materials is indicative of a widespread exchange network, often referred to as the "Hopewell Interaction Sphere" (Caldwell 1964). The two most common Hopewellian burial facilities are mortuary crypts (i.e., log tombs) and charnel houses (Brown 1979), both are covered by burial mounds.

Middle Woodland components at Dogtooth Bend are well-represented, as Stephens (1995) identified 15 components in the Len Small Floodway, Koldehoff and Wagner (2002:83) report five sites with Middle Woodland bladelets and a Middle Woodland habitation site, and PCI identified one, possibly two, Middle Woodland site during this project. Diagnostic artifacts include Snyder points, Chesser Notched points, lamellar blades, as well as plain and fabric-impressed ceramics that are characterized as "Baumer-like" (Stephens 1995:172). Stephens (1995) remarks that Middle Woodland sites "are dispersed over the northern and western portions" of the floodway. There appears to be a local radiation into the floodplain, and use of the side-slopes of ridges adjacent to swamps and/or swales. The first village size settlement in the Len Small Floodway, Site 11AX76, formed at this time. To the northeast, the Red Light (11AX222) and Frog City (11AX223) sites are important nearby Middle Woodland components (Santeford and Lopinot 1978).

Across the river, the LaPlant phase (Phillips 1970; Toth 1988; Williams 1954) is thought to represent the local emergence of Hopewell-like culture in the Cairo Lowland. The two best known LaPlant phase sites are on Barnes Ridge: LaPlant I (23NM51), the type site; and St. Johns (23NM272). The LaPlant phase, originally the Barnes Ridge phase (Williams 1954:30), is based on ceramic collections obtained in surface collections from the LaPlant I site. Griffin and Spaulding (1952:2) provided the first description of the material from this site, remarking that "the zoned decorated and stamped pottery...is obviously influenced by the Illinois Valley 'center' and is perhaps most closely connected with Hopewell sites in southeastern Illinois." The LaPlant phase is often though of as a site unit intrusion from the Crab Orchard area of southern Illinois (Phillips 1970:887; Seeman 1979). Others point out similarities to the Havana tradition (Williams 1974:53). While the distinctive rocker-dentate stamped and broad line incised zoned Hopewell ceramics are the most diagnostic artifacts, only a trace of these sherds actually exists in the LaPlant I assemblage (12/1316, or 0.9 percent; Toth 1988:33). Plain and cord marked pottery dominate the sample, even fabric-impressed is present at only the trace level. Other distinctive LaPlant phase ceramic traits were noted during Toth's analysis of a sample from the St. Johns site. These traits include: "pie crust" rim notching on Mulberry Creek Cord Marked *var. Sevier*; cord wrapped stick impressions on Withers Fabric Impressed *var. Twin Lakes* rims; presence of Evansville Punctated; and a new variety of Cormorant Cord Impressed (*var. Bayouville*), where complicated designs are placed on the upper portions of vessel using individual cord impressions (Toth 1988:77-80).

In western Kentucky, the best known Middle Woodland site is Indian Camp (15CE19), a large multi-component village on the Mississippi River floodplain (Sussenbach and Lewis 1987). A shallow Middle Woodland midden yielded a few Crab Orchard Fabric Impressed and Crab Orchard Cord Marked vessels, but it was dominated by Mulberry Creek Cord Marked ceramics. Lewis (1996:57) interprets Indian Camps as "the remains of a seasonal encampments that were directed at exploitation of the floodplain resources...successive occupations were not confined to a small, well-delimited site area."

In the Reelfoot Lake Basin, Mainfort (1996:82) remarks that the "Middle Woodland period is poorly known and apparently poorly represented." The Amberg Mounds (15FU15) is cited as

the only example of a Middle Woodland ceremonial site in the Reelfoot Lake Basin. Habitation sites may be underrepresented due to survey bias or may reflect a broad pattern, as few Middle Woodland habitation sites are known even around the Pinson Mounds (Mainfort 1996:83).

Late Woodland

During the Late Woodland period (A.D. 400-800) the elaborate ceremonialism, trade networks, and earthworks construction activities associated with Middle Woodland times become attenuated. There is a dispersal of the regional population that may be related to the introduction of the bow and arrow ca. A.D. 700 (see Blitz 1988). Bow technology may be responsible for the reduction of "the production of stone points to near zero" during the Late Woodland (Dunnell and Feathers 1991:26). Toward the end of the Late Woodland territorial units formed that may have lead to regional stabilization (Chapman 1980).

Late Woodland components at Dogtooth Bend are well-represented, as Stephens (1995) identified 13 components in the Len Small Floodway, Koldehoff and Wagner (2002:83) report a number of Late Woodland sites, and PCI identified one possible Late Woodland component during this project. Diagnostic artifacts include Barnes series, Raymond series, and Baytown series ceramics, Lowe Flaired Base PP/Ks. The Late Woodland sites in the Len Small Floodway appear to be associated with the more prominent landforms, and are clustered on the northern ridge systems. However, there are several Late Woodland sites in the floodplain. All but one of the Late Woodland sites are low-density and suggestive of a brief or short-term occupation.

In the Cairo Lowland, the Late Woodland is characterized by the Hoecake phase. It was originally presented as pre-Hopewell (S. Williams 1954:29), but this was scrapped years ago in favor of it as a Baytown[4] period phase (Phillips 1970:902-903; J.R. Williams 1974:55). The ceramic complex is characterized by Mulberry Creek Cord Marked and Baytown Plain, with the former outnumbering the latter up to five to one in cases. Minority types include Larto Red, Withers Fabric Marked and sand-tempered types (Phillips 1970:902). Williams (1974:87) remarks that "Although there is no specific pottery types which characterizes the phase, the combination of certain percentages of various types characterizes it." The key site is Hoecake (23MI8), the largest site in Central Mississippi River Valley, covering 200 a. and originally containing at least 31 mounds (Morse and Morse 1983:215; J.R.Williams 1974:55-87). It appears to be a "locally dispersed community made up of residential areas and mounds" and it bridges the transition from Baytown to Mississippian (Morse and Morse (1983:190, 215).

West of Sikeston Ridge the Late Woodland occupations contemporary with the Hoecake phase are identified by sand-tempered (Barnes or Kennett) ceramics of the Dunklin phase. This area of southeast Missouri was characterized by the sand-temper ceramics during the Early Woodland Pascola phase as well. The proximity of these two dichotomous ceramic traditions (clay versus sand) during the Late Woodland is interpreted as representing "opposite extremes of the segmentary tribe" (Morse and Morse 1983:192). Hoecake phase (and Baytown phase to the south) groups appear to have been organized into larger more socially complex settlements than Dunklin phase groups. Alternatively environmental differences (i.e., sandy soils) may account for the paste variability (Phillips 1970).

Emergent Mississippian

In southern Illinois, the period A.D. 800-1000 is characterized by the Dillinger phase. The Petitt site (11AX253), on the Mississippi River bluffs near Thebes, is the best known Dillinger phase site (Webb 1992). The most distinctive Dillinger phase trait is folded rims, especially on

[4] Baytown is a term which has number of archaeological meanings, primarily: (1) a ceramic tradition; (2) a Late Woodland phase, ca. A.D. 400-700, in east Arkansas; and (3) a general reference to the Woodland stage.

globular jars and the predominance of cord marking. The Petitt site ceramic assemblage, dated A.D. 850-950 is over 97 percent clay tempered and over 87 percent cord marked. Only a "handful" of sherds are shell-tempered and no red-filmed wares were recovered (Webb 1992:335). Petitt is believed to have been occupied by a small residential population that was seasonally inflated by other groups using the site as a fishing camp. The site exhibited a "puzzling" absence of evidence of participation in regional and local exchange networks. This can be interpreted as evidence of cultural isolation.

Emergent Mississippi components at Dogtooth Bend are well-represented, as Stephens (1995) identified 23 components in the Len Small Floodway, Koldehoff and Wagner (2002:83) report 14 possible Emergent Mississippi sites, and PCI identified one possible Emergent Mississippian site during this project. Diagnostic artifacts include Baytown and Dillinger phase ceramics, Scallorn and Madison PP/Ks, and hoes. During the Emergent Mississippian, Stephens (1995) identified several nodal sites and numerous dispersed habitation areas within the Len Small Floodway. Higher elevations, including terraces and ridges, were utilized. Most Emergent Mississippian sites in this area represent re-occupied locations.

Regionally the Emergent Mississippian is characterized by the Varney horizon, which Morse and Morse (1990:157) indicate "seems to date tightly within the A.D. 800-1000 time period." In the Cairo Lowland "most of the available early Mississippi period information comes from Hoecake" (Lewis 1996:67). J.R. Williams (1974:76-78) reported Varney Red Filmed from excavation areas I, III and IV at Hoecake. Additionally, Morse and Morse (1990:160) list nine other sites besides Hoecake in the Cairo Lowland that are considered "Major Varney Red" components.

In the Reelfoot Lake Basin, Mainfort (1996:84-91) has documented a "Red-Filmed Horizon" dating to A.D. 950-1050 at three large sites: Samburg (40OB1), Foxhole (40LK10) and Lindamood (40LK5). At these site red-filming is the predominate decorative mode on both shell- and grog-tempered ceramics. These sites, and Hoecake, are interpreted as sedentary agricultural villages.

The Beckwith phase (A.D. 800-1000) is a "shaky" Coles Creek period construction proposed by Phillips (1970:912-913) in an effort to establish a transitional phase—the "roots"—to the climatic Mississippi period Cairo Lowland phase. Coles Creek culture is characterized by distinctive decorated varieties of clay-tempered pottery, new vessel shapes, the beginning of substructure mound-and-plaza complex and maize agriculture (McNutt 1996:223). Coles Creek culture begins in the Tensas Basin ca. A.D. 700 and spreads north, while at roughly the same time Emergent Mississippian begins in the American Bottom and moves south. Beyond nomenclature, there are a number of problems in dealing with the transition from Late Woodland to Mississippian in the Cairo Lowland; primarily these stem from the grog-tempered monotony of the local assemblages, coupled with the extreme longevity of grog-tempered ceramics in this area. Lafferty (1998:146) contends that "...in the Barnes Ridge and Sugar Tree Ridge portion of the Cairo Lowland, clay temper was used well into the thirteenth century and perhaps even later. As presently defined, the Beckwith phase ceramic complex is characterized by "an overwhelming preponderance of Baytown Plain over Mulberry Creek Cord Marked" (Lafferty and Price 1996:5-6). Minority types, also found in the Cairo Lowland phase, include Wickliffe Thick, O'Bryan Incised and Matthews Incised, and with rare types including Wheeler Check Stamped and Larto Red (Phillips 1970:913).

To conclude, the Late Woodland/Emergent Mississippi period in the confluence region exhibits a curious admixture of stability and change. Evidence for momentous cultural shifts foreshadowing the Mississippi period—such as the introduction of the substructure mound-and-plaza complex, the apparent rise of two-tiered site hierarchy and formation of territorial

units—can be traced to this period. Some new technologies are adapted, such as the bow, and we see an increasing reliance on maize toward the end of the period. Yet at the same time, ironically, there is a counter trend of stability, evidenced by a continuing, stubborn reliance on grog-tempered ceramics. Largely as a result of this the Late Woodland phases are "an assumed sequence without the definition of sortable criteria" (Lafferty and Hess 1996:I:26). Older land surface that exhibited heavy Late Archaic and Early Woodland occupations, continued to be utilized during the Late Woodland, indeed they may have witnessed their maximum prehistoric occupations during this period of population dispersal.

Mississippian

The Mississippian period (A.D. 1000-1500) is the third and final "zenith" of native cultural development. During the Mississippi period the confluence region supported one of the largest populations in the southeastern U.S. and "was not far behind the Great American Bottoms (Cahokia) as a focal center in the development of Mississippian culture" (Phillips 1970:926). Hallmarks of the Mississippi period include population increase, intensive floodplain settlement, greater emphasis on agricultural activity, earthwork construction on celestial alignments, inter-regional exchange of exotic items, shell-tempered ceramics, and possibly bow warfare. These factors and the development of a distinctive elite iconography—the Southeastern Ceremonial Complex (Howard 1968)—are associated with the rise of conscripted, complex sociopolitical system, known as chiefdoms.

The transition from Emergent Mississippian to Mississippian took place ca. A.D. 1000-1050, when Varney Red Filmed ceramics use declines rapidly. The Morse's (1990:157) note that during the Mississippian "culture crystallized into what is often called "mature" Mississippian." This period is marked by settlement diversity, with fortified ceremonial centers, smaller villages, and isolated farmsteads, as well as intensive corn agriculture, and rise of independent chiefdoms.

The early Middle Mississippian (A.D. 1050-1200) is associated with the "Beaker Horizon" of Morse and Morse (1990:157). Beyond the distinctive, but rare, beakers, diagnostics include: O'Byam Incised, Mound Place Incised, loop handled jars, appearance of bottles and plates, and a variety of arrow points, including Madison, Scallorn and Schugtown types. Later Middle Mississippian occupations (A.D. 1200-1400) are associated the "Matthews Horizon" (Morse and Morse 1990:158). During this period the plate vessel form disappears, large strap handled jars are common, and painted ceramics become more frequent. Trade intensified, not only in exotic items but also in Mill Creek hoes and basalt azes (Morse and Morse 1983:267). Exchange of Southeastern Ceremonial Complex artifacts, including copper repoussé plates, stone images, and shell gorgets with a distinctive icongraphy, peaks at this time (see Phillips and Brown 1984; Brown et al. 1990). Considerable social change took place, with the settlement pattern shifting from a relatively dispersed pattern of farmsteads and villages with a few ceremonial centers to a pattern characterized by large villages with constituent hamlets clustered around major civic-ceremonial centers (Morse and Morse 1983). Fortified towns develop during this time (Hopgood 1969; Price and Fox 1990). This realignment and establishment of a settlement hierarchy is associated with the rise of chiefdom level societies.

Mississippian components at Dogtooth Bend are the most common type, as Stephens (1995) identified 31 components in the Len Small Floodway, Koldehoff and Wagner (2002:83) report 14 Mississippian sites. Local diagnostic artifacts include Mill Creek chert hoes and fragments, Mississippi Plain and Bell Plain like ceramics, Madison points, and gouges. The local cultural landscape is dominated by the NRHP listed Dogtooth Bend Mound Center. This site covers 28 ha on the north bank of Lake Milligan. It is believed to have once contained five mounds, but today exhibits a 5 m high truncated pyramidal mound, a mound remnant, and an associated village deposit (Fowler and Hall 1978; Jefferies 1987; Peithman 1951; Stephens 1995:39). This

site was tested during a salvage project, resulting in the identification of two wall trench structures (Stephens 1996).

Other Mississippian sites in Dogtooth Bend are interpreted as farmsteads and hamlets associated with this polity. There appears to be an unoccupied "halo" around the mound center, some 2 km wide, that was unoccupied. Mississippian site selection was based on the characteristics of local topography and well drained soils, rather than proximity to the mound center (Stephens 1995:180-181).

The Mississippi period in the Cairo Lowland is represented by the Cairo Lowland phase (Hopgood 1969:65; Lafferty and Price 1996:7-10; Morse and Morse 1983:262-266; Phillips 1970:925-927; S. Williams 1954:273). Because of the intense antiquarian interest in southeast Missouri, the Cairo Lowland phase "is without question the most profusely documented archaeological phase in the Lower Mississippi Valley" (Phillips 1970:925). In spite of this, however, the description of the Cairo Lowland phase ceramic complex is "...difficult because our typology...has not yet caught up with the problem of separating "clay" and shell-tempered versions of the characteristic types and varieties" (Phillips 1970:925). Lafferty and Price (1996) summarize the critical Cairo Lowland phase attributes as:

> ...represented by both clay- and shell-tempered pottery of diverse forms. Phase markers include O'Byam Incised, Kimmswick Fabric Impressed, and Wickliffe Thick ceramics. Type components are found at Sandy Woods and (late) Crosno...Large mounds and earthen walls associated with ditches are associated with this phase [Lafferty and Price 1996:7-8].

There was a general abandonment of Mississippian ceremonial centers and villages in the Cairo Lowland after A.D. 1450. This is part of a broader pattern that Williams (1990) refers to as the "Vacant Quarter Hypothesis." While the region may not have been completely vacant, it is clear that a major socio/political change had occurred during and that settlement of the Cairo Lowland became greatly attenuated during the Late Mississippi period. The bulk of the population may have relocated (S. Williams 1990:177)—perhaps to the Lower St. Francis where a large population existed during the Late Mississippi period—or have been decimated by a plague (Ramenofsky 1987) or adversely effected by a natural disaster (earthquake, drought, flood).

PROTOHISTORIC

The Protohistoric period (A.D. 1540-1673) is generally considered to have begun with the first appearance of Europeans in the Southeast. However, terming seventeenth-century aboriginal occupations as "historic" versus "protohistoric" is a rather arbitrary division. De Soto visited the several chiefdoms in the St. Francis Basin in 1541, including Aquixo, Casqui and Pacaha. Two of his men, Moreno and Silvera, traveled northeast from Pacaha and apparently visited the Campbell Site (23PM5) on Pemiscot Bayou (Dye 1993:49). Pemiscot Bayou is notable for a tight cluster of Protohistoric sites that Price and Price (1990:61) describe as "the most extensive and intensive occupation in the southeastern part of the state". These sites are considered Armorel phase components (S. Williams 1980). They produce low frequencies of European trade goods, including distinctive metal artifacts and glass beads, in association with Mississippian artifact types. Armorel phase traits also include the use of applique designs on ceramics, snub-nose scrapers and Nodena points.

The Protohistoric occupation of the confluence region has not been well investigated, but Lewis (1990:54, 1996:73) has summarized the available data. Lewis (1990, 1996) uses the Jackson phase (A.D. 1500-1700) to characterize most of the Protohistoric period in the confluence region. Mainfort (1996:94) criticizes the Jackson phase construct, indicating that "there are virtually no data" for it. Jackson phase components are reported at three sites in the Cairo Lowland—Callahan-Thompson (23MI71), Hess (23MI55) and the Story Mound

(23MI510)—and three sites in western Kentucky, Adams, Sassafras Ridge and Twin Mounds (Lewis 1996:73). Additionally, a large Jackson phase site at Wolf Island in the New Madrid Floodway, the "Hickman" site, was reported destroyed by looting and farm construction (Morse and Morse 1983:299). Two dwellings at the Hess site have yielded Protohistoric radiocarbon dates, the 1 σ cal. date ranges are 1444-1642 and 1424-1649 (see Table 3-03). Across the river, in the Reelfoot Lake Basin, Mainfort (1996:94) reports two sites, Otto Sharp (40LK4) and 15FU119, that date ca. A.D. 1650. Otto Sharp is well-documented and notable for exhibiting a distinctive "very late" Mississippian assemblage, as well as for yielding four metal artifacts and a *Bison* bone (Lawrence and Mainfort 1992).

Historic Stage

Historic Aboriginal (A.D. 1550-1835)

The first official record of European entry into the Ohio-Mississippi confluence region was the journey of Frenchmen Marquette and Joliet who descended the Mississippi in 1673. These explorers make no mention of contacting any natives between the Ohio and Arkansas rivers (Marquette 1954). However, the Protohistoric section above demonstrates that during the seventeenth-century there were a few scattered households, possibly small villages, of Native Americans living on (or near) the Mississippi River floodplain for at least 50 river miles or so below the mouth of the Ohio. It is possible the population density was so low that a chance encounter just did not happen. Alternatively, the ca. 1650 inhabitants may have had been displaced by 1673, as Walthall and Emerson (1992) indicate that during the seventeenth-century, central Algonquian and Siouian groups inhabiting the Midwest came under increasing pressure from Iroquois raids beginning about 1650. Perhaps this pressure resulted in abandonment of the confluence region. During the Early Historic period, the Dogtooth Bend area was probably claimed by some group as hunting ground (such as the Illini, Shawnee, Osage or Michigamea), much as western Tennessee was an "unhabitated" hunting ground claimed by the Chickasaw (Satz 1998:152).

Marquette's 1673 map reveals a Michigamea village in close proximity to what would become the Missouri-Arkansas line. Morse (1992:61) considers this village to be the Grigsby site (3RA262). This site is roughly halfway between Kaskaskia and the 1673-1690 location for the Kappa site and it is on the Natchitoches Trace, a major trading path that follows the Ozark escarpment. The Michigamea are thought to have operated as trading middlemen between the Illinois French and the lower Arkansas Quapaw, until the establishment of Arkansas Post near the Quapaw village of Osotouy in 1686 provided direct access to trade goods for the Quapaw.

Sites thought to represent late seventeenth and early-eighteenth century Illini villages located on the Mississippi, above the Dogtooth Bend include, proceeding upriver: the Apple Creek Village, Kaskaskia Village (Guebert), Kolmer/Waterman, Des Peres Village, Cahokia Village, and the Hass-Hagerman site (Grantham 1993:9). During this period, the Osage dominated the Ozark uplands. Goodspeed (1888:236) indicates that "when the settlement of Missouri was begun there was no tribe between the Osages and the Mississippi River." The confluence region was undoubtedly involved in the European trade network, as by the late-seventeenth century at least 800 *coureurs de bois* (forest rangers) were hunting in west New France (Arnold 1991:7).

Euro-American Period (A.D. 1673-Present)

The Euro-American Period in Southern Illinois history opens with an increase in interior exploration and settlement combined with a decline in aboriginal population. Following Marquette and Joliet's trip exploration down the Mississippi River, the French began to establish a number of forts and trading posts along the Mississippi and Ohio. Fortification of the Ohio valley, in part, led to political unrest and eventually war. The French maintained control of the

confluence region until it was lost to the British and their allies following the French and Indian War (Seven Year's War) in 1763 (Webb et al. 1989:16).

Southern Illinois was originally part of the Ohio Territory established in 1783. During this time the first settlement, McElmurry's Station was established in what would become Alexander County. This frontier outpost was located along the Mississippi near Fayville along the western margin of the study area. Subsequent territorial subdivisions during the early-nineteenth century resulted in the creation of a separate, Illinois territory in 1809. Following the War of 1812, which ended in 1815, increasing numbers of settlers moved to the frontier including Southern Illinois. Illinois was admitted to the Union in 1819. Alexander County was created at the same time. With its creation, a number of towns were established in the county including Cairo (Webb et al. 1989:16-17).

Prior to the Civil War, the local economy of Alexander County thrived on forestry and farming. River traffic taking advantage of the county's strategic confluence location facilitated the export of farm and forest products abroad. Between 1852 and 1855, the Illinois Central Railroad was constructed through Alexander County. The railroads became the primary means of shipment causing a decrease in the importance of river traffic just before the Civil War (Webb et al. 1989:17).

During the Civil War, Alexander County served as a supply and manufacture base for the Union Army. At Cairo, the Union army maintained an expansive base throughout the war, which served to supply troops engaged in fighting down river (Webb et al. 1989:17). At nearby Mound City, the Union Navy maintained a shipyard where ironclad warships were manufactured.

The late-nineteenth century represents the initial part of "Tenant period" that is dated 1870 to 1950 (Stewart-Abernathy and Watkins 1982). The period is named for the sharecropping or tenant farm labor system that was a significant characteristic of southern U.S. agriculture after the Civil War. This decentralization of the old plantation system developed during the reconstruction period as a means of stabilizing labor relations between former slaves and landowners. Although not a slave state, extreme Southern Illinois shared "plantation-like" farm complexes with its former confederate neighbors.

The importance of the tenant farm period in the archaeological record is that it represents the maximum occupation of Mississippi Floodplain areas. The dispersed settlement pattern of the tenant period contrasts sharply with the clustered settlement pattern prior to 1865 (Orser and Nekola 1985:68). The tenant settlement pattern can be also observed on 1930s and 1940s aerial photographs, with alignments along roads and bayous at regular spacing. Sites dating to this period are numerous.

The general archaeological characteristics of tenant period sites include high frequencies of Kitchen Group artifacts, primarily bottle glass and ceramics, largely dating from the late-nineteenth century to the mid-twentieth century. The ceramics are typically cheaper types, often from mismatched sets, and many of these types can be identified following Price (1979). Mean ceramic dates are often not calculated for these sites due to the long span of whiteware production, as well as problems relating to temporal lag.[5] Omitting brick counts, the Architecture Group artifacts are generally about as frequent as Activity Group artifacts in surface collections. Architectural Group frequencies rise substantially in excavated samples, largely due to the recovery of nails. Only trace frequencies of other artifact groups are found (Arms,

[5] Garrow et al. (1989:60) note that "South's (1977) mean ceramic date (MCD) formula tends to break down after ca. 1860 ... the primary reason is that neither manufacturing or popularity date ranges have been firmly established for the post-1860 period."

Clothing, Personal, Furniture, Tobacco), and in small assemblages these minority group types are often not represented.

The cultural deposits at tenant period sites are typically near surface, often plowzone only contexts, as a result of the buildings being frame structures elevated on brick, concrete, or cypress stump piers. If a house did not have a substantial chimney, it was more likely to be swept away during a flood (cf. Buchner 1992). Occasionally tenant sites are multi-component, i.e., co-occur with prehistoric material; this is largely dependent on the natural setting of the site. Many tenant period sites are located on silty clay backswamp soils that were not suitable for human habitation until after drainage improvements were made.

Modern Era

The modern era (1940-2002) opened with a labor shortage at the onset of U.S. involvement in World War II (1941-1945). The outward migration of local Negroes is considered part of the "Great Migration," when numerous southern blacks moved to northern urban centers seeking industrial employment and relief from discrimination (Katznelson 1973).

Another modern characteristic is farm mechanization. Tractors were introduced in the 1930s and mechanical cotton pickers followed in the 1940s (Holley 2000). With the switch to mechanized agriculture, the need for farm labor decreased even further. As a result, many small communities disappeared and the house sites are now plowed under. Farm mechanization has also contributed to an increase in the average farm size during this era.

The modern era in Alexander County is perhaps dominated historically by the catastrophic 1993 flood. It was this event that prompted the archaeological study reported herein. Detailed documentation of the flood and its effects on the local landscape has been succinctly commented on by Stephens (1993). The USACE also maintains a number of readily available electronic data on the world wide web.

4. FIELD AND LABORATORY METHODS

BY ERIC S. ALBERTSON

LITERATURE AND RECORDS SEARCH

On Monday, March 22, 2004, the author met with St. Louis District Corps archaeologist Suzanne Harris. During the meeting, Harris provided the author with a number of historic and engineering maps depicting the Dogtooth Bend and prescribed project area(s).

A site files check was conducted at the Illinois State Museum (ISM) Collections Center in Springfield on Tuesday, March 23, 2004. Information regarding previous archaeological studies and recorded sites in and around the present study area was compiled during this visit. The author was assisted by ISM staff member Nicholas Klobuchar in this endeavor.

Additional materials consulted during the project included holdings in the extensive personal libraries of the authors and other PCI staff members, the Memphis District Corp's library and map room, the University of Memphis Library, and the Illinois State Archives.

ARCHAEOLOGICAL FIELD METHODOLOGY

Site detection methods relied on a close-interval visual inspection of the project area. Systematic inspection of exposed ground surfaces was conducted by pedestrian transects spaced at five meter intervals. Pedestrian transects were run parallel to one another, commonly using existing field rows as a directional guides when possible. Nearly all portions of the prescribed study area(s) were engaged in active cultivation at the time of survey. Most fields had been recently tilled in preparation of spring planting. Aside from a few locales, surface visibility encountered was greater than 40 percent throughout the survey area. In some cases it was much better, ranging from 80 to near 100 percent. However, a few of the fields examined during this survey yielded poor surface visibility. One such 16.2 ha (40 acre) field located in Section 32 contained high winter wheat and yielded no surface visibility throughout the course of fieldwork. Following the harvest of this crop, the field was immediately overplanted with drilled beans and surface visibility remained very low. We were denied permission to excavate shovel tests within one of the fields, and it was not surveyed. Moreover, several significant portions of the prescribed survey area were covered in large amounts of river sand deposited during the 1993 flood event. Such areas typically ranged from 6 to 10-ft. in thickness and were not amenable to survey via surface inspection or shovel testing. The extent of coverage of these features was accurately demarcated on project maps. No further investigations were undertaken at such sand-covered locations.

When artifacts were encountered along pedestrian transects the interval was tightened and crew members congregated in the find area and conducted a representative surface collection. A bias towards temporally sensitive artifacts was made during the collection. However, a representative collection of all artifact type and material classes was attempted. A total collection was not attempted at any of the identified or revisited sites. However, at isolated finds and exceptionally low-density scatters, total collection could not be avoided. Locations of individual artifacts were temporarily marked with bits of flagging tape. The maximum areal extent of the flagged artifacts represented the basis for the site size. The flagging tape also helped visually identify any artifact concentrations if present. A central point within each scatter was selected and its exact location determined utilizing a Motorola LGT 1000 DGPS unit attached to a Starlink MRS radio beacon receiver. Additional documentation of each identified site included a sketch map and brief notation by the Field Director regarding the site's natural setting, collecting conditions, materials

recovered, local informant information when available, etc. Photographs of potentially significant resources were also taken.

ARCHAEOLOGICAL LABORATORY METHODOLOGY

All artifacts recovered during the study were transported to the PCI laboratory facility in Memphis, Tennessee. There, all artifacts were cleaned, sorted, and systematically analyzed according to the procedures outlined below.

PREHISTORIC LITHIC ARTIFACTS

Lithic artifacts were sorted according to a modified version of the scheme in general use throughout the Southeast. For the present study we have adapted the following categories/sorting criteria after Lopinot et al. (1998, 2000) and Ahler et al. (1997). Initially, all lithic artifacts were divided into two major categories, debitage and tools. Within each of these major categories, a series of specific artifact types are defined. The latter are described in detail below.

Core Debitage

- *Tested Cobble*–cobble that exhibits very few flake scars (i.e. less than 3) evidencing an attempt to inspect interior material quality.
- *Cobble Core*–cores that retain sufficient portions of cortex to ascertain that they were manufactured from a cobble. These are differentiated from the *Tested Cobble* category above by the presence of three or more flake scars.
- *Tabular Core*–cores that retain sufficient portions of their original bedded interface surface so as to be identified from a tabular cryptocrystaline deposit. They normally exhibit one or more flat faces. Incipient fracture planes occurring in other chert forms (i.e. nodular, etc) can occasionally be mistaken for tabular specimens during analysis.
- *Amorphous Core*–cores that are irregular in shape and do not retain structures such as cortex, etc. that allow for the determination of the material's original form (i.e., cobble vs. tabular); they are normally sufficiently large to allow further reduction in the manufacture of tools.
- *Shaped Core*—cores that have been intentionally prepared in a manner to allow for specific reduction techniques.
- *Exhausted Core*–cobble with most or all cortex removed and evidence of primary flake removal from multiple faces; normally very small.
- *Core Fragment*–small portions of cores showing some evidence of flake evidence of flake removal.

Flake Debitage

- *Primary Flake*–complete flake exhibiting cortex on more than half of the dorsal surface; originate during early stages of core reduction.
- *Secondary Flake*–complete flake exhibiting cortex on less than half of its dorsal surface; also result from early core reduction.
- *Tertiary Flake*–complete flake retaining no cortex and instead exhibits multiple flake scars on the dorsal surface; result from late-stage core reduction.
- *Bifacial Thinning Flake*–exhibit faceted platforms combined with a lip formed at the platform/ventral surface juncture; completely lacking cortex and exhibit evidence of two or more prior flake removals on their dorsal surface; result from late stage biface reduction during thinning and shaping phases.
- *Flake Fragment*–incomplete flake specimens.
- *Micro-debitage*–debitage measuring less than 0.25", normally recovered from the heavy fraction while processing flotation samples or similar fine screen recovery methods. It is occasionally recovered during survey level investigations when recognized in the screen prior to being pushed through.

Informal Tools

- *Utilized Flake*–debitage exhibiting informal modification to one or more lateral margins through expedient use.

Formal Tools

- *Primary Biface*–minimally reduced biface or fragment thereof exhibiting only primary flaking; often thick with a sinuous edge; normally retains a portion of cortex; most often represents an early stage production failure.
- *Secondary Biface*–biface or fragment thereof exhibiting primary and secondary flaking; retains little if any cortex; cross-section is thinned and lenticular; margins are straightened somewhat; often represents a late stage production failure or perform.
- *Tertiary Biface*–biface or fragment thereof exhibiting systematic, secondary and tertiary flaking; exhibits straightened edges and thin cross-section; often represents an unidentifiable completed tool fragment such as a PP/K medial, etc.
- *Drill*–bifacial tool refined through steep retouch to form an acute, elongate projection for the purpose of functioning as a drill; often manufactured through resharpening of a PP/K.
- *Unifacial Scraper*–unifacial flake tool exhibiting secondary and/or tertiary flaking (i.e., intentional retouch) along its lateral margins.
- *End Scraper*–unifacial tool manufactured on a flake; exhibits primary flaking along a portion of the dorsal surface; secondary flaking along the proximal end of the flake forms a steep working edge; exhibits hafting provision.
- *Untyped Scraper*–unifacial tool that is highly crude or otherwise not further classifiable-normally represented by fragmented specimens.
- *Spokeshave*–unifacial tool exhibiting secondary flaking (i.e., intentional retouch) in a concentrated area forming a small crescent to round indention in the margin of the tool.
- *Projectile Point/Knife (PP/K)*–fully shaped and thinned biface reflecting secondary and tertiary flaking; proximal end exhibits a formally prepared haft element. Most PP/Ks were typed following Justice (1987). Other, more local sources were consulted as well.

Other Lithic Artifacts

- *Fire-cracked Rock (FCR)*–stone that has been either naturally or thermally altered; evidenced by spalling, crazing, and discoloration.
- *Shatter*–specimens that have most likely resulted from cultural modification but lack traditional flake characteristics such as positive percussion features; primarily of angular pieces of chert including thermal shatter that do not fit into any of the above categories or types.

Size Grading

All flakes categorized as primary, secondary, tertiary, or bifacial thinning were placed into one of five potential size grades. These are defined as follows: Size Grade 1 includes all flakes smaller than 1 cm; Size Grade 2 includes all complete flakes larger than 1cm but smaller than 2 cm; Size Grade 3 includes all complete flakes larger than 2 cm but smaller than 3cm; and so on. Note also that this progression of size grades can be carried out infinitely to accommodate debitage of any size if so desired by the researcher. Size grade values are presented within the tabulations of recovered artifacts in *Appendix B*.

Raw Material Assignments

The raw material used in the manufacture of all lithic artifacts categorized under the formal tools and core debitage categories described above. Flake debitage and other lithic artifacts were not assessed in this manner. A brief description of the chert types recognized in the assemblage is provided in the sections below. Raw material assignments are included in the master artifact

table presented as *Appendix B.* Note that some specimens could only be assigned to broad geologic age based on fossils present or other distinguishing factors.

- *Bailey Chert*–Bailey chert is produced from a like-named, Devonian-aged, limestone formation. Bailey Limestone lies atop the southern portion of the Ozark Hills in Illinois. The chert is available in residuum along streambeds in southern Union and northwest Alexander Counties (Koldehoff 1985). Koldehoff (2002:135) notes three basic color variants of Bailey chert: bluish-gray, olive-green, and tan. This chert type reportedly weathers quickly causing variance from the basic colors of this chert. The bluish-gray variety weathers to a greenish color and adopts variable sized mottles and streaks. The olive green variety weathers to a greenish or yellowish gray color with subtle steaks and mottles. The tan variety weathers to a darker tan and too becomes mottled and streaks. Based on heat treating experiments, reportedly limited, Webb et al. (1989:55) note Bailey chert achieves a reddish brown color when heated. Koldehoff (2002:135) further notes that combinations of the color varieties can occur, sometimes with striking results. Bailey chert occurs as small nodules and blocky lenses. It is suitable for manufacture of only moderate-sized bifaces in most cases. Webb et al. (1989:55) indicate "extremely similar chert also occurs in earlier local Silurian formations such as the Sexton Creek Limestone." Specimens of the latter chert are reportedly rarely of sufficient size to be used in the manufacture of lithic tools. They caution it may infrequently occur in recovered assemblages, however, and may be mistyped as Bailey material.
- *Cobden/Dongola*–Cobden/Dongola chert occurs in the Mississippian-aged St. Louis Limestone formation. The chert is named for two Illinois towns, Cobden and Dongola found along Big and Clear creeks respectively (Morrow 1988; Koldehoff 2002:136). Spielbauer (1972) notes that Cobden/Dongola chert exhibits similarities to Hornstone from Indiana and Reed Springs (or gray Boone) chert from the Ozark Mountain region of Arkansas. Cobden/Dongola chert occurs in nodular form. The nodules are normally round in shape and exhibit a weathered yet smooth cortex that is normally buff in color. The matrix of Cobden/Dongola chert can be characterized as fine grained and blue-gray to blue-black in color. The matrix can be homogenous in color or distinctively banded (Spielbauer 1984). Cobden/Dongola chert was the subject of biface and bladelet production and exchange sphere across the mid-continent during the Middle Woodland period (Koldehoff 2002; Lafferty 1994; Morrow 1987; Winters 1984).
- *Elco Chert*–Elco chert occurs in residuum and is associated with the Fort Payne limestone formation. It occurs normally in blocky or tabular form and is of low to moderate quality (Lopinot and Butler 1981). The source area of Elco chert is roughly the same as Mill Creek Chert (Koldehoff 2002:136). Freshly fractured Elco chert reveals a black to dark gray matrix with bluish gray streaks. It weathers to a dark gray color with brownish gray streaks in what Koldehoff (2002:136) describes as a "wood-grain pattern". Koldehoff (2002:136) further notes that Elco is close in appearance to Dover chert from Tennessee and Kentucky but can be distinguished from the latter material on the basis of lower quality.
- *Kaolin Chert*–The geologic source of Kaolin chert is unknown, as the type is found only in residuum. One possible parent formation for Kaolin chert is the Mississipian-aged, Vienna Limestone Formation (Spielbauer 1984). Kaolin chert occurs in only two areas: one near Iron Mountain, which is located a short distance west of Cobden in Southern Illinois (Winters 1984; Morrow 1988; Hofman and Morrow 1985), and the other along a tributary of Big Creek near Balcom (Koldehoff 2002:137). Kaolin chert occurs in tabular and nodular form. Nodules are generally lenticular or discoidal in shape (Morrow 1988; Hoffman and Morrow 1985) and also irregular forms (Spielbauer 1984). The cortex of this chert varies from yellow-white to black and is often pitted. The matrix of this chert varies in colors ranging from white, light gray, yellow, brown, red, and purple, and is occasionally banded (Snyder et al. 2002; Koldehoff 2002:137). "Webbed" banding occurs on this chert type as a result of light reflection on the fractured surface and/or staining of porous areas in the material (Spielbauer 1984). Translucency is a common characteristic of this chert type.

Kaolin chert varies from coarse to fine grained. Fine-grained specimens are highly lustrous (Snyder et al. 2002) and are sometimes mistaken for chalcedony (Hofman and Morrow 1985).

- *Kornthal Chert*–Until recently, the geologic source of Kornthal Chert was unknown. Recent efforts by the Illinois State Geological Survey have identified primary deposits of Kornthal chert in the Cretaceous-aged McNairy Formation (Devera 1993, 2001; Nelson 1995; Nelson et al. 1995). It is commonly recovered in residuum along upland streams in Union and Alexander Counties. It may also occur in similar formations of Kentucky and Missouri. It occurs as large cobbles, but it can also reach boulder size (Koldehoff 2002:137). It is a multicolored, brecciated to conglomeritic material that commonly ranges from pinkish-gray to red but can also be blue, yellow, brown, or white. Conglomeritic specimens often contain large, angular inclusions of white chert or quartz (Stephens 1995:34). Kornthal Chert is often low to moderate quality although high quality specimens also exist. Very fine-grained Kornthal chert is typically tan or gray and exhibits a thin, waterworn cortex. Koldehoff (2002:138) notes that high quality Kornthal can be mistaken for Mounds Gravel. Regarding utilization of this raw material, Koldehoff (2002:137) notes that "while Kornthal chert was intensively exploited near its source areas, it was rarely used outside these areas."
- *Mounds Gravel*–Mounds gravel is easily distinguished by a thin, dark to light brown water-worn cortex. Often grainy, the matrix of this chert ranges from dark brown to light gray. The matrix of this chert is often mottled or streaked as well. Heat treating typically results in a reddish color change. Quartzite variants of Mounds Gravels also occur. This material is best suited to the manufacture of small tools because the material is usually found in small cobble form (Koldehoff 2002:139). Some of the raw material typed as Mounds herein, may actually be Tuscaloosa or Mississippi River gravels, which are virtually indistinguishable from Mounds.
- *"Other" Cherts*–Raw materials typed as "other" represent unidentified types. Thermally altered materials not sortable into one of the above types are also included in this material category.

Prehistoric Ceramic Artifacts

Following washing, all prehistoric ceramic specimens were size graded. Those larger than 1/2" were categorized as sherds and subjected to the full analysis detailed below. Those specimens smaller than 1/2" were categorized as sherdlets. The only data variable recorded for sherdlets was mass.

Where possible, individual sherd specimens were analyzed to the type/variety level following a number of regional sources. Sherds were also classified by vessel section including rim, body, and base designations. Changes in vessel form, modes, and attributes were also a focus. Such analyses are particularly sensitive to tracking change through time and within varying site contexts. Particular modes believed to be chronologically sensitive, i.e., rim form, handle style, lip modification, etc., are subject to formal analysis. Rims generally provide the greatest amount of additional information and were separated for additional investigation. This included rim form and orientation, lip form, and lip modification. Diameter was calculated on those sherds large enough to provide that data.

Historic Artifacts

Recovered historic artifacts were sorted following South (1977) into a series of functional groups (e.g., Kitchen Group, Architectural Group, Activities Group, etc.). Within each group are a number of individual artifact types or classes.

CURATION

All project artifacts and attendant data are currently being prepared for permanent curation at the Illinois State Museum. Curation follows the 36 CFR 79, *Curation of Federally-Owned and Administered Archaeological Collections,* guidelines and will be in accordance with the St. Louis District Corps and Illinois State Museum standards. No artifacts have been, nor will be removed from the collection prior to transfer to the curation facility. Currently, the artifacts and attendant data are contained in five, acid-free Hollinger boxes.

GEOMORPHOLOGICAL FIELD AND ANALYTIC METHODOLOGIES

The methodologies employed during geomorphological examination of the study area were presented in the preceding *Environmental Setting* chapter and are not repeated here.

5. LITERATURE AND RECORDS SEARCH RESULTS

BY ERIC S. ALBERTSON

A standard site files check was conducted at the Illinois State Museum (ISM) Collections Center in Springfield on Tuesday, March 23, 2004. Information regarding previous archaeological studies and recorded sites in and around the present study area was compiled during this visit. The author was assisted by ISM staff member Mr. Nicholas Klobuchar in this endeavor. Additional materials consulted during the project included holdings in the extensive personal libraries of the authors and other PCI staff members, the USACE–Memphis District library and map room, the University of Memphis Library, and the Illinois State Archives.

The following sections offer a summary of the body of information accumulated during the literature and records search process. It includes an extensive cartographic review as well as a review of previously conducted archaeological studies in the Dogtooth Bend area.

GLO PLAT MAP AND SURVEYOR'S NOTES REVIEW

A review of GLO plat maps and accompanying surveyor's notes for each of the three townships containing portions of the present study area were reviewed. The results of this review including copies of the plats is provided below on a township by township basis. Please note that the surveyor's notes were in very poor condition for several portions of the study area. Thus portions of transcriptions of these notes are often labeled "illegible." However, a sufficient portion of the notes were in such condition so as to offer reasonably complete view of Dogtooth Bend's physical nature during the very early nineteenth century.

TOWNSHIP 16 SOUTH—RANGE 1 WEST

Review of the 1807 GLO plat of T 16 S–R 1 W revealed little change in the roughly 200 years since production of the map and today (Figure 3). Most noticeable is the course of the Mississippi River, which has moved northward approximately one mile during the latter interim. Also, the Cache River is now diverted into the Mississippi. As the plat depicts, the Cache historically flowed into the Ohio.

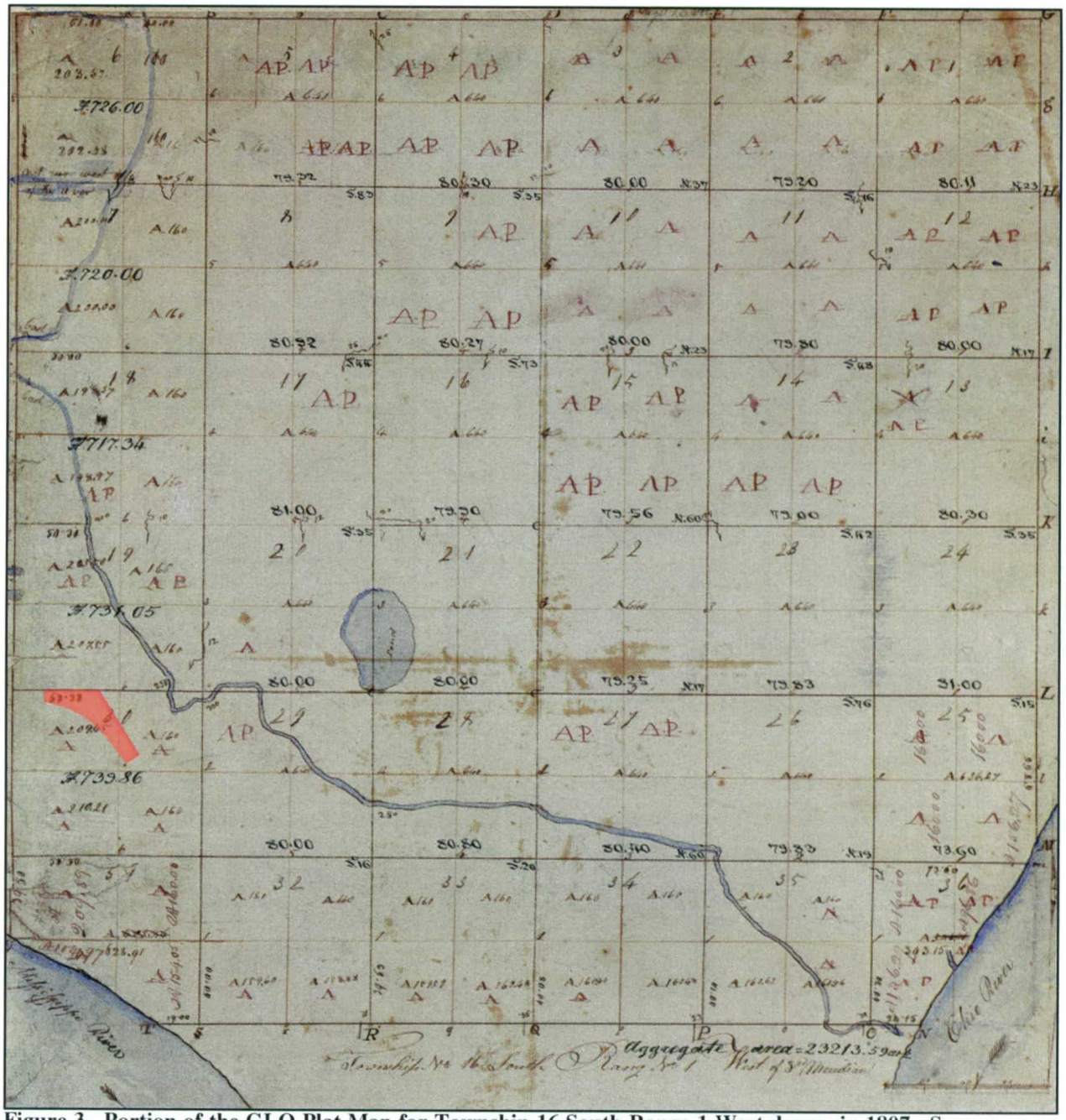


Figure 3. Portion of the GLO Plat Map for Township 16 South Range 1 West drawn in 1807. Survey areas are shaded in red.

Taken on an unknown date (1807 or before), the surveyor's notes for the interior line survey around Section 30, which contains the easternmost survey tract, are most relevant. The latter notes have been transcribed as follows:

West along line between sections 19 & 30

15.00[1] Cash [sic] 250 lks south
32.00 gum 20 in.
40.00 set a half mile
post from
which a W. ash 12
N35 E19 lks W. ash
20 S65 W28 links
83.75 B. oak 20 Ins. dr. [diameter]
92.32 Set post on the West boundary 89
links North of
section corner
from which a
maple 15 N85 E27
B. oak 10 N41 W2. This land rich
& [illegible]

South between sections 29 & 30

1.00 Cash [sic] River 300 lks
East
40.00 Set a half mile post
from which an Elm
12 N85 E24 lks Iron-
wood 6 S [illegible] 12 lks
62.50 Elm 40 Ins. Diam.
80.00 Set post to corner of
Secs 29 30 31 & 32
from which a gum 12 N40 E26.5 lks
Over good level
Land Timb[er] oak
ash gum &
underbrush [illegible]

West between sections 30 & 31

40.00 Set half mile post
from which an Elm
12 S30 E6 links
another Elbm 6 Ins. Diam
bears S57 E17 links
62.60 Elm 10 Ins. Diam.
92.50 Set post corner of
sections No. 30 & 31
on the W boundary
77 links north of
Section corner from
which a hackberry 8
S40 E3 Links another
Hackberry 10 N16 E14
This mile over
Rich level land
Timber oak ash & gum

[1] Number(s) represents chains and fractions, or links, thereof. Given that one chain equals 66-ft. and there are 100 links per chain, one link equals 0.66 chains or 7.92 inches.

TOWNSHIP 16 SOUTH—RANGE 2 WEST

The 1826 GLO rendering of T 16 S–R 2 W depicts the central portion of Dogtooth Bend much different than it appears today (Figure 4). Most prominent of these differences is the position of the Mississippi River. In 1826 (actually much earlier when the survey was conducted), the river occupied a channel at the south end of what is now Grand Lake. This channel occupied significant portions in a couple of the study tracts investigated during the present study. The river has since moved approximately 0.5-mi. to the southeast. Also readily apparent on the plat is the shape of Horseshoe Lake. Although depicted as a large body of open water on the 1826 plat, a notation indicates that the lake contains one or more islands not depicted. Thus, the lake probably appeared more like it does presently, although the neck of the cutoff must have still been conjoined as the surveyors did not survey the interior of the lake which would have been a relic point bar. A significant number of cypress swamps and "drowned lands" are noted on the map also. Most of the latter are clustered around Horseshoe Lake. The northernmost extent of several of the study tracts border a number of these swamps.

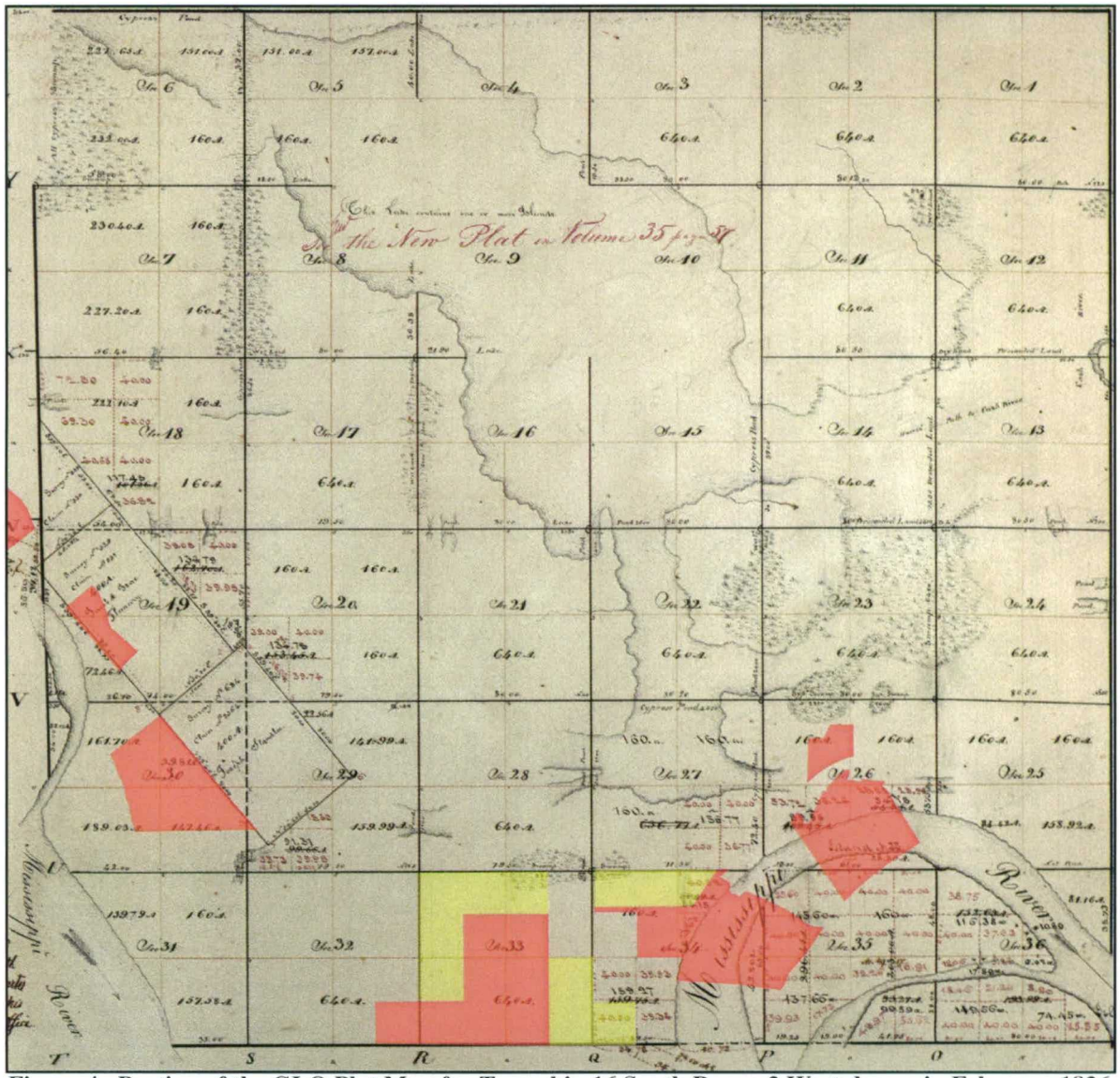


Figure 4. Portion of the GLO Plat Map for Township 16 South Range 2 West drawn in February 1826. Survey areas are shaded in red. Additional areas surveyed or previously recorded sites relocated within are shaded in yellow.

Taken in February 1807, the only surveyor's notes available (or legible) for this township are those for the eastern boundary determination. Unfortunately, the notes for the interior survey are in negative image form and are too dark to be read in almost all cases. Regardless, the boundary survey does give a picture of the eastern third of the project area. Boundary survey of the east side of sections 24 and 25 are most relevant here. The surveyor's notes have been transcribed as follows:

Along the East boundary of section 24 Town 16 Range 2 West

16.55 a poplar 60 in. dia.
22.50 to a pond 46 lnks wide
E& West
to a ditto [illegible]
40.00 Set 1/4 Sect post from
which a W.O. 5 in. Dia.
bears S79 W28 lks &
gum 18 in. Dia. bears S41 E25 lks.
56.75 a gum 18 in. dia. [illegible]
80.00 Set a post corner to
Secs 24-25 from which
gum 18 in. Dia. bears
S71 W61 lks& a gum 24 in.
D[ia.] B[ears] N64 W 54 lks
This mile is fine rich land
timber gum, oaks, etc.

Along the East boundary of section 25 Town 16 Range 2 West

39.50 [illegible]
[illegible]
which a Beech 14 in.
Dia. bears N18 W4 lks
& an ash 7 in. Diam bears
N78 E18 lks
55.25 a gum 48 in Diam in line
80.00 Set a post corner to sects
25 & 30 from which a
gum 9 in. Dia. bears
N44 W25 lks & a [illegible]
8in. Dia. bears S24 W35 lk.
This mile rich land
Bottom, timber gum
poplar, oaks &
[illegible]

TOWNSHIP 16 SOUTH—RANGE 3 WEST

Review of the 1836 GLO plat for T 16 S–R 3 W reveals that the Mississippi River course has changed little at this location in the past approximately 170 years (Figure 5). The only real difference is that the river has made a slight migration to the east in the vicinity of Section 13. Both Goose and Burnham Islands have continued to develop downstream in the interim between the GLO and modern renderings of this location. Recall the latter islands now reach southward to near the north end of Section 24.

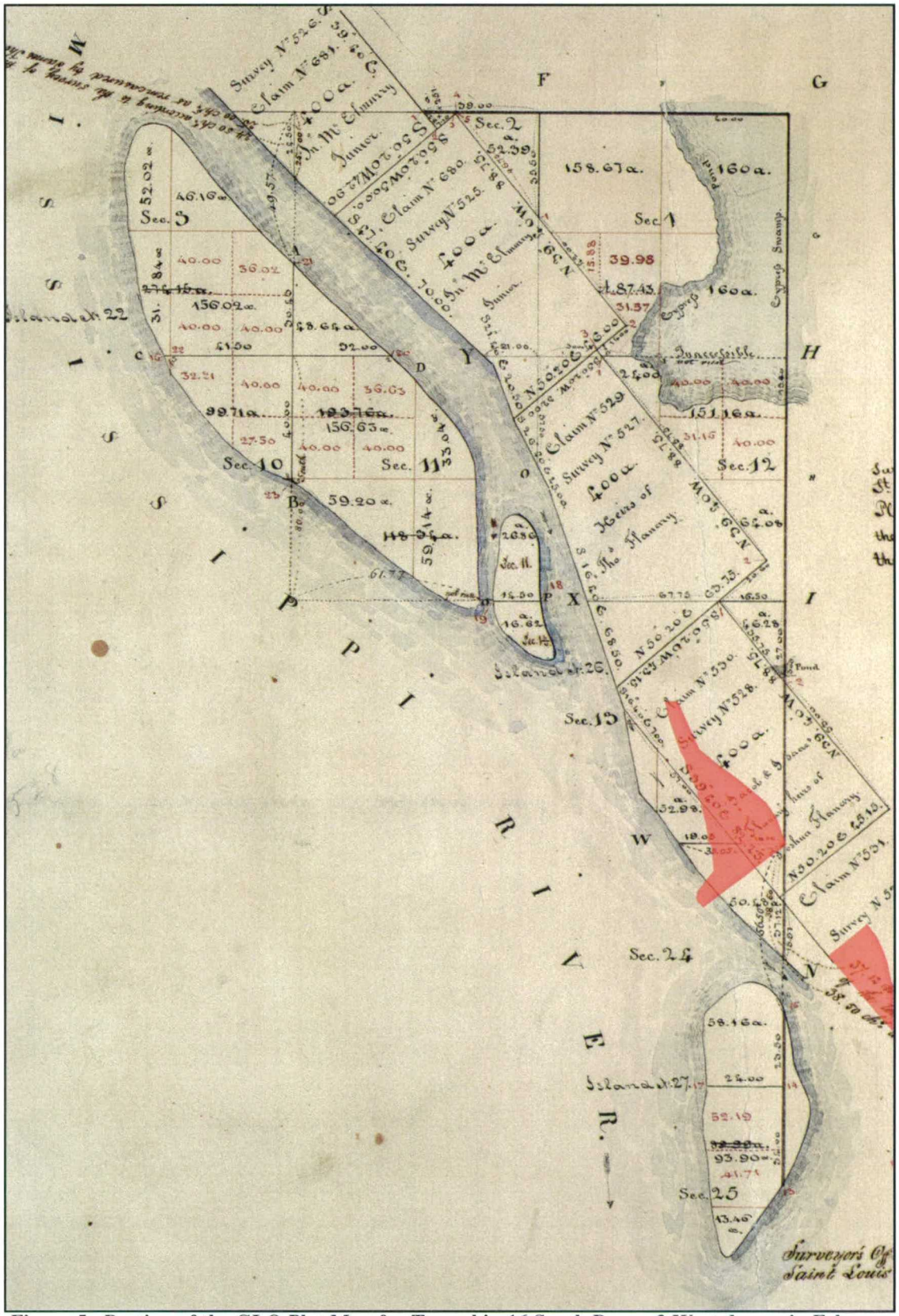


Figure 5. Portion of the GLO Plat Map for Township 16 South Range 3 West drawn in February 1836. Survey areas are shaded in red.

Taken in March 1810, the surveyor's notes regarding the interior subdivision of the township in the vicinity of Sections 13 and 24 are most relevant to the present study area. The interior line between the latter sections actually bisects part of the survey area. The surveyor's notes have been transcribed as follows:

West Between Sects 12 & 13

22.25 Hickory 10 in. Dia[meter]
40.00 An Elm 12 in. Dia.
Sect[ion] cor[ner] a Gum 18 in. Dia.
Bears [illegible] 11 lks[links] to a Dog
wood 5 in. Dia. N70 W35
67.75 Set a post on River Bank
cor. to Sects. 12 & 13 from
which a Sassafras 14 in.
Dia. Brs[Bears] S78 W4 lks. to a
Gum 6 in. Dia. S77 E13
this mile level rich bottom land timr[timber]
Poplar, Ash, & some
Slashes undergrowth
greenbriers, spice
Pawpaw, etc.

West Between Sects 13 & 24

11.18 an Ash 10 in. Dia.
35.03 a Sweet Gum on Bank
of the River 18 in. Dia.
Cor. tree to Sects. 13 & 24
from which a Sycamore
20 in. Dia. bears S76 E55
lks to a [illegible] 15 in. Dia.
N38 E57links.
level rich bottom
land timr. Poplar
Ash, Hickory, etc.

[Traversing along the river bank on the west side of Sections 13 and 24]

from the S. E. cor. of Town[ship]
16 S. R. 3 W.
thence up the river with
the meander along
thereof along the
Westwardly Boundary
of Sect. 24
Thence N47 W28.50
chs[chains] thence N39 W
20.00 chs.
Thence N43 W3.68 chs.
to the cor. of Sects. 13
& 24
Thence N36 W along
the West Boundary of 13
15.00 chs. thence N49
W50 thence N43 W
28.00 chs.
Thence N10 W17.50
thence North 25.00 chs.
thence N1 W6.20 chs.
of [illegible] a small Island [now Burnham Island]
cor. of Sects. 12 & 13

[notation included describing grant/claim in Sections 13 and 24]

Began at Corner of Sections No. 13 & 24, Township
No. 16 South Range No. 3 W. Thence
West on line between said Sections
at 16.50 Chains intersect the
South Easternly line of the Heirs
of Thomas Flanary. [illegible] Survey No. 529
Claim No. 529 in a [illegible] Thence with
said line S43 W9.50 chs to the upper or
Northerly boundary of Jacob
& Isaac Flanary's Survey No.
528 Claim No. 530.

USGS 15' Quadrangle Sheets

Three, pre-1960 USGS 15' quadrangle sheets covering the project area were reviewed. The latter are discussed in chronological order below. Additionally, relevant portions of the maps have been reproduced and are illustrated in the following sections.

1934 USGS Thebes, MO-IL 15' Quadrangle Sheet

At first glance, the 1934 USGS Thebes, MO-IL 15' quadrangle sheet (Figure 6) reveals Dogtooth Bend appears much the same as it did approximately 70 years ago. For instance, the Mississippi River course is nearly identical to the modern day channel and both Lake Milligan and Grand Lake appear prominently on the landscape. The Cache River continued to flow in its natural channel to the Ohio River in 1934. Construction of the diversion canal, which now empties the Cache into the Mississippi, would not be constructed for another decade and a half. In terms of demographics however, the bend was much different than today. The bend's population was much more substantial as evidenced by the number of domiciles (small filled in squares) indicated on the quadrangle sheet. It is also evident from the five schools housed in the bend. From the north to south the schools are: Lake Creek School; Phillips School; Central Bend School; Lake Milligan School; and, the Lower Bend School. In 1934 the bend also contained a church, Mt. Zion, and one marked graveyard, the Bumgard Cemetery. Two rail lines, the Missouri Pacific and Illinois Central also crossed the northern end of the bend.

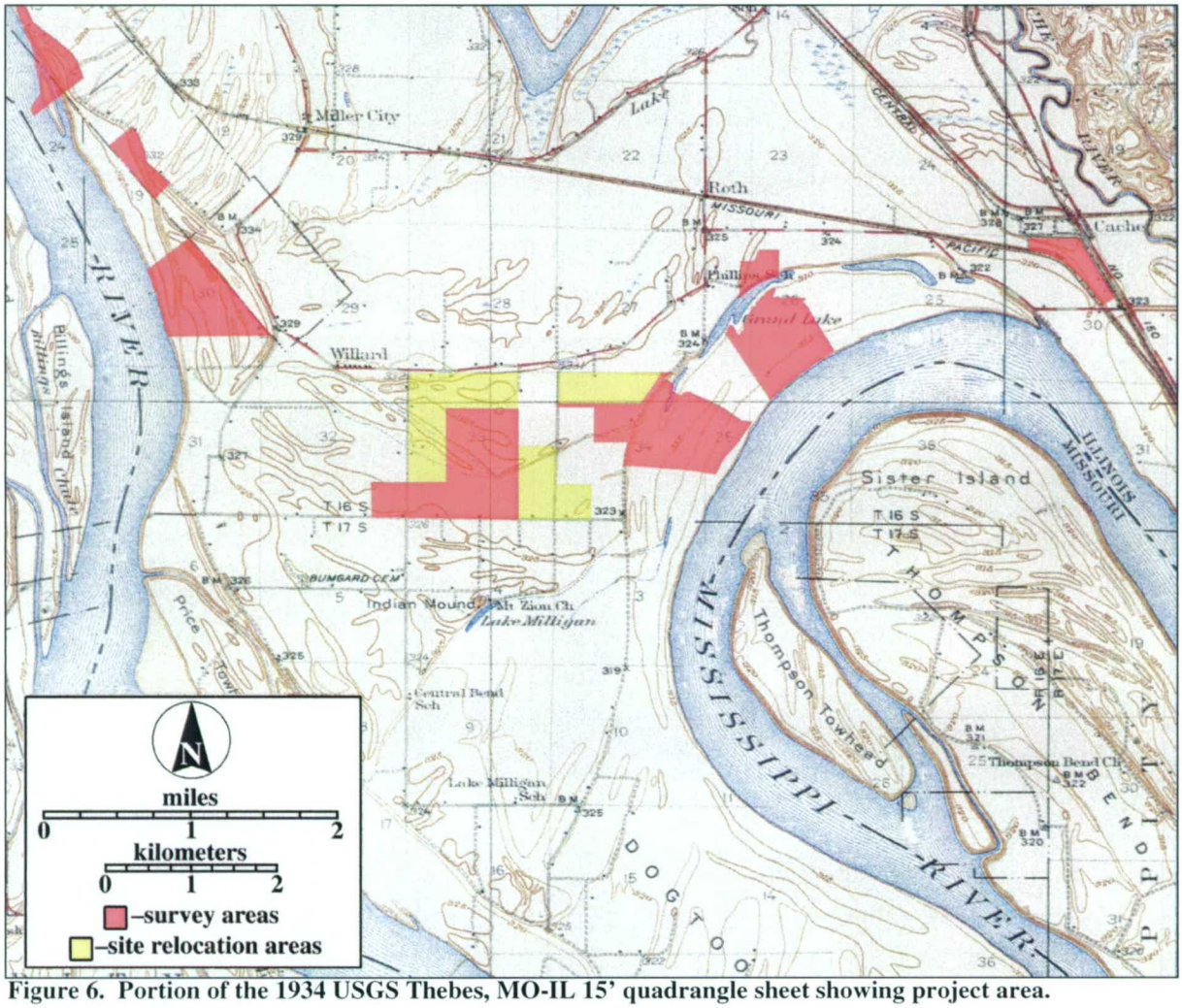


Figure 6. Portion of the 1934 USGS Thebes, MO-IL 15' quadrangle sheet showing project area.

1939 USGS THEBES, MO-IL 15' QUADRANGLE SHEET

Not surprisingly, five years after publication of the last map reviewed, Dogtooth Bend had changed little (Figure 7). A number of revetments are depicted along the Mississippi's banks by 1939. It is not clear if the revetments were constructed between 1934 and 1939 or if they were simply not shown on the earlier map. Otherwise, the 1939 map is essentially identical to the 1934 edition.

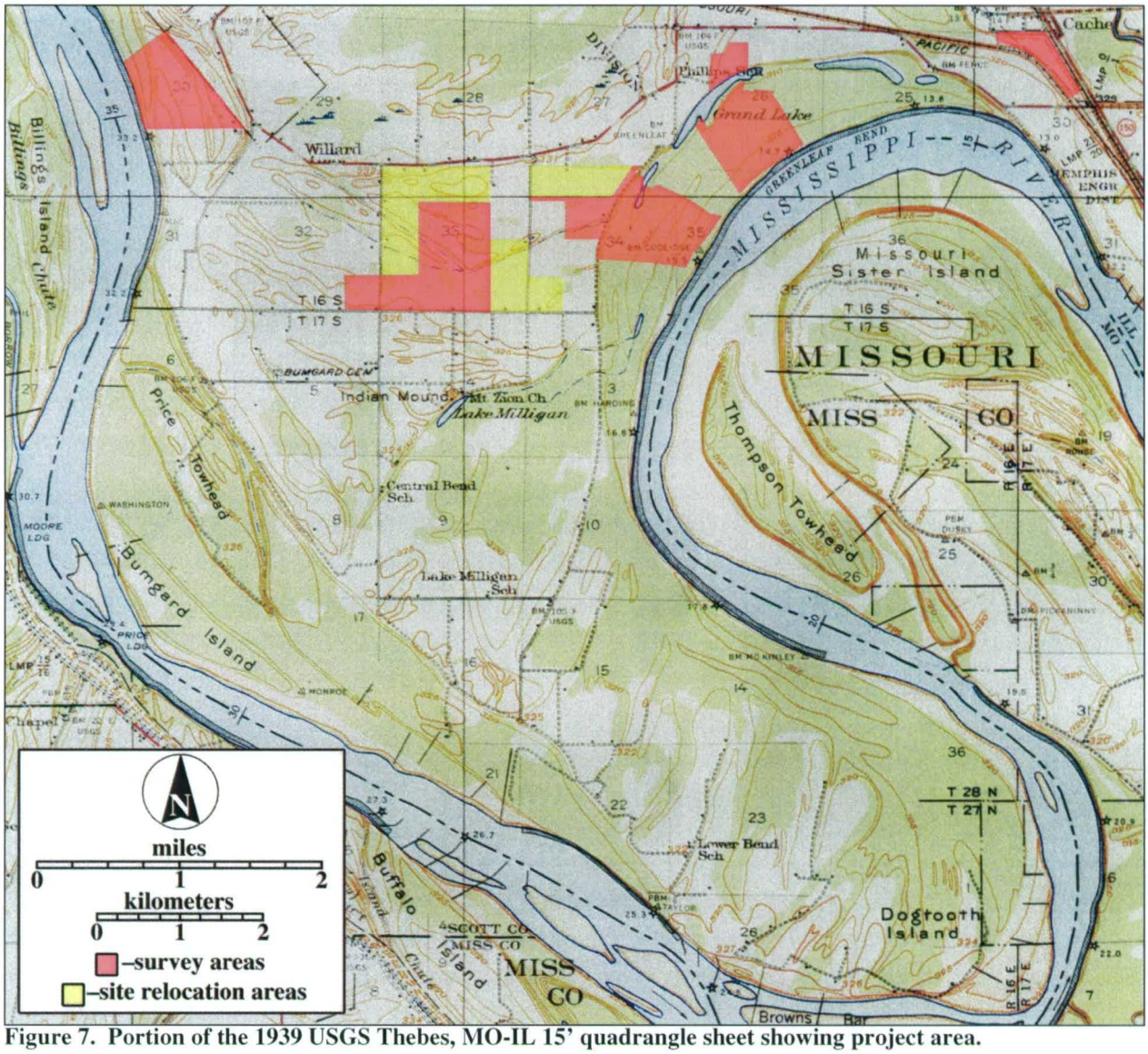


Figure 7. Portion of the 1939 USGS Thebes, MO-IL 15' quadrangle sheet showing project area.

1955 USGS THEBES, MO-IL 15' QUADRANGLE SHEET

By 1955, Dogtooth Bend saw two significant changes since 1939, both related to the Mississippi River. In 1950 the Cache River diversion canal was completed, diverting waters into the Mississippi River south of Cache instead of into the Ohio to the southeast. In addition, a levee had been constructed in the northwest portion of the bend to protect the community of Willard and lands to the east. Population in the bend rose nominally as evidenced by an increased number of domiciles on the map. Despite this increase, a couple of the former (ca. 1934) schools, Lower Bend and Lake Milligan, had been closed by 1955. One new school, Williams School, was opened at Willard. Two churches had been constructed between 1939 and 1955, the Community Chapel east of Willard and the Mount Pleasant church near Roth. Several roads within the bend also saw improvement during this time period (Figure 8).



Figure 8. Portion of the 1955 USGS Thebes, MO-IL 15' quadrangle sheet showing project area.

Previously Recorded Archaeological Sites in Dogtooth Bend

As of March 2004, there were 126 archaeological sites recorded in the records held by the ISM in the central and upper portion of Dogtooth Bend. The vast majority of these sites were identified during Stephens (1995) study.

Previous Archaeological Studies Within Dogtooth Bend

The following sections offer summaries of the various archaeological studies conducted prior to that reported herein within Dogtooth Bend. Koldehoff and Wagner (2002:25-31) offer a succinct summary of previous prehistoric archaeological studies farther afield in Alexander County. Additionally, their (i.e., Koldehoff and Wagner 2002) study of the Horseshoe Lake area is a significant contribution to the archaeological data set from Alexander County in and of itself.

1976 Mississippi River Shoreline Survey

During 1996, Lawrence Santeford of Southern Illinois University at Carbondale conducted a shoreline survey along the Mississippi River prior to levee repairs by the St. Louis District Corps. Portions of the shoreline survey encompassed the southern and western areas of Dogtooth Bend. While the survey failed to identify any sites within Dogtooth Bend, two Middle Woodland Sites (Red Light and Frog City) were identified (Santeford 1977; Santeford and Lopinot 1978:1) a short distance east of the bend near the Cache River Diversion Canal. Santeford and Lopinot (1978) later conducted limited archaeological testing at both sites.

1993 Center for Archaeological Investigations Dogtooth Bend Survey

During the summer of 1993, the Center for Archaeological Investigations (CAI) conducted an archaeological survey of 848-a. (or 343 ha) of selected locations within Dogtooth Bend. The project was conducted as part of a joint field school with participants from Southern Illinois University, Murray State University, Southeast Missouri State University, and Eastern Kentucky University. The project resulted in the recordation of 93 sites, five of which had been recorded previously. One of the previously recorded sites was the Dogtooth Bend Mound Center (11AX31 and 11AX74). Stephens and crew conducted a systematic survey of this extensive Mississippian site, identifying four additional possible mounds and a probable plaza area[1]. A total of 143 prehistoric components from 63 sites were identified ranging from the Middle Archaic through Mississippi period. Historic period components were identified at 28 of the sites. Historic period occupation dating from the mid-nineteenth to mid-twentieth centuries were identified (Stephens 1995:ii). Fortuitously, the survey was completed immediately before the catastrophic flood of 1993. Stephens revisited the survey area on several occasions in 1995. Preliminary assessments of impacts of the flood to the sites identified during the survey were made during these visits.

1994 University of Illinois at Urbana–Champaign Emergency Levee Survey

During the summer of 1994, the University of Illinois at Urbana-Champaign conducted a survey of approximately 9-a. for the Illinois Department of Transportation prior to emergency levee construction. The survey was conducted west of the Willard community along Miller City Road and a conjoining Alexander County road. Both roads were damaged during the great flood of 1993 and rendered "sand trails" by a subsequent levee breach in the spring of 1994. The survey, which included several scoured areas along the roads, failed to result in the identification of any cultural resources (McElrath 1994; IHPA Short Report).

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[1] Stephens (1996) later conducted salvage excavations at 11AX31, identifying two wall trench structures at the site. Because the technical report generated from those excavations was not readily available for review, detailed results of the study are not summarized above.

1994 ITARP Miller City Road Repair Survey

In 1994, Foor, Brown, and Tufftee of ITARP conducted a phase I survey of approximately 52-a. adjacent to Miller City Road. The survey was conducted prior to planned construction activities seeking to repair the road following 1994 inundation. The survey failed to result in the identification of any cultural resources (IHPA Short Report).

1996 Center for Archaeological Investigations Horseshoe Lake Dredge Spoil Deposition Area Survey

In 1996, archaeologists from the Southern Illinois University at Carbondale, and the CAI conducted a phase I survey of 590-a. slated as potential spoil deposition locations in the northern portion of Dogtooth Bend. The study was conducted for the Illinois Department of Natural Resources, and preceded dredging activities in the southern portion of Horseshoe Lake. A total of 46 sites, 10 of which were previously recorded, and 40 isolated finds were identified during the study. Thirty-eight of the sites contained prehistoric components ranging from the Middle Archaic to the Mississippi period. Nineteen sites contained historic components. Identified historic components ranged from early to mid-nineteenth century through exclusive twentieth-century occupations. Twenty prehistoric sites and one historic site were recommended potentially eligible for the NRHP following the study (ISM Short Report; unpublished manuscript on file at ISM; Koldehoff and Wagner 2002).

National Register of Historic Places Listings

As of this writing, there were seven Alexander County properties listed in the NRHP. Only one, the Dogtooth Bend Mounds and Village site (11AX31 and 11AX74) is located near the study area. The Dogtooth Ben Mounds are located approximately 800 m south of the southernmost extent of the survey area. A detailed description of the site has been provided in both the sections above and in the *Cultural Background* Chapter. The site was added to the NRHP in 1978. Of the other six listed properties, three are located in Cairo. The other three are found in Thebes, Tamms, and McClure respectively.

National Historic Landmarks

As of this writing there were no National Historic Landmarks found in Alexander County.

6. GEOMORPHOLOGY RESULTS

BY DRS. RANDEL T. COX AND ARLEEN A. HILL

INTRODUCTION

The proposed Len Small floodway (Figure 9) occupies the upper portion of Dogtooth Bend, Illinois, a large bend of the Mississippi River south of Thebes Gap at the northern terminus of the Mississippi Embayment. The rural location is primarily an agricultural area with extensive row crop fields. During the 1993 Mississippi River Valley flood, levees protecting the study area failed inundating many of these fields with water, levee materials, and flood debris. The flood also generated scouring, removing much of the topsoil and underlying sediment. The objective of this investigation was to characterize the landforms and shallow subsurface and surficial geology of the site through map and aerial photography inspection, field observations, electrical ground conductivity surveys, core descriptions, and description of trench exposures.

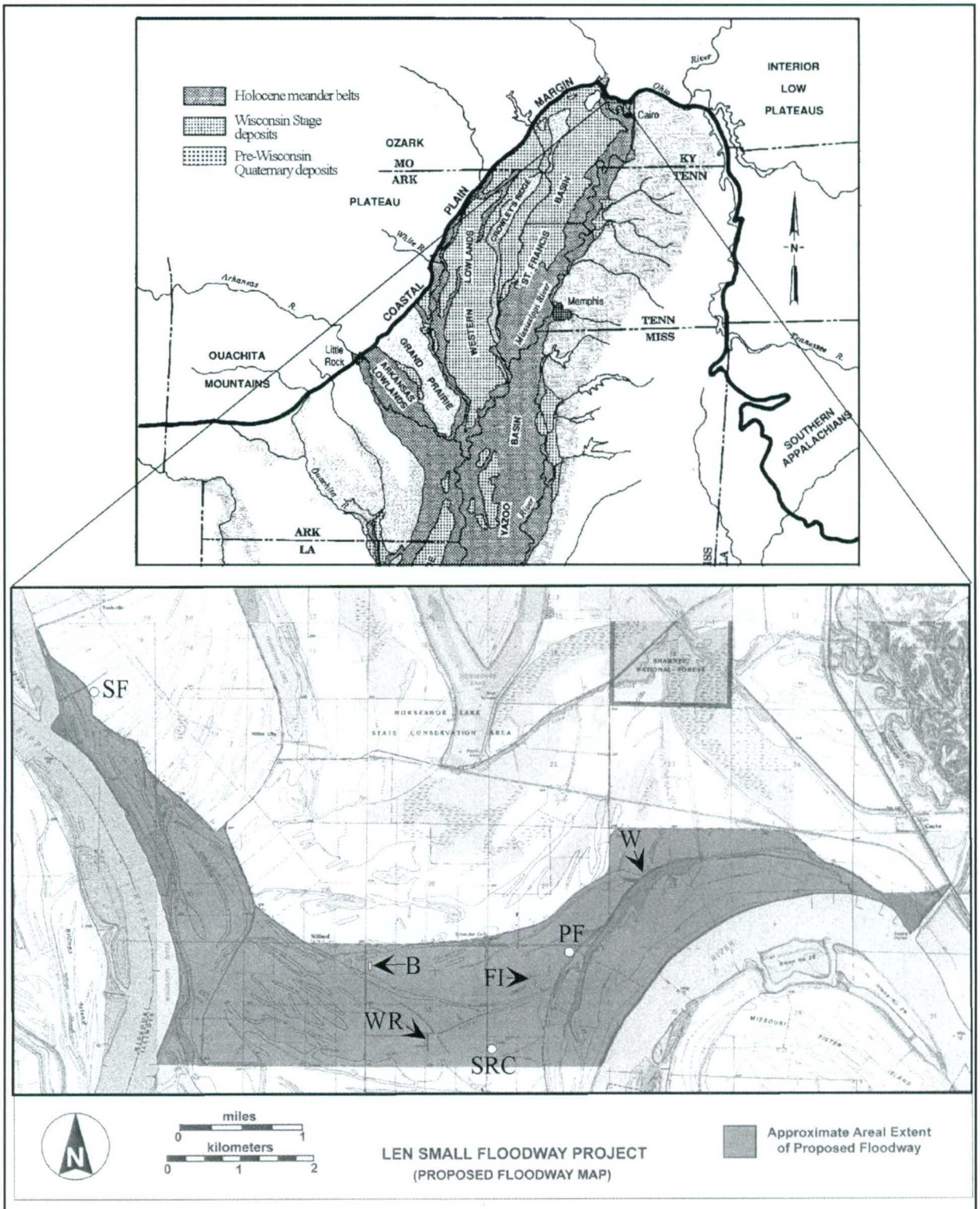
INVESTIGATIONS UNDERTAKEN AND METHODS

Two trenches were mechanically excavated by trackhoe in May of 2004 prior to planting season. Trenches were excavated by trackhoe, and trench walls were logged and described in detail to establish the stratigraphic relationships of alluvial deposits and soil horizons. In addition to trench excavations, exploratory holes of moderate depth were hydraulically push-cored using a trailer-mounted Giddings coring rig and the sediments described. Electrical ground conductivity surveys and hand augering were also employed as techniques to select sites for detailed study. Maps of ground conductivity permit assessment of sand/clay ratios at shallow depth (< 6 m). Low versus high conductivity values indicate sand versus clay, respectively, but absolute values depend on soil moisture levels on a given day.

GEOMORPHIC SETTING

Dogtooth Bend is in the extreme northern end of the Lower Mississippi Valley (LMV) Holocene (10,000 years ago to present) meander belt. This meander belt is comprised of point bar sand and gravel deposits, natural levee sands and silts, overbank silts and clays, and abandoned channels filled with sand, silt, clay, and organic material. The LMV occupies the axis of the Mississippi Embayment geologic province (Figure 9). The Mississippi Embayment (Figure 9) is a southwest-plunging trough filled with late Cretaceous to Quaternary sediments (Stearns 1957; Murray 1961; Cushing et al. 1964; Autin et al. 1991). Sediments are marine or fluvial/marine deltas (Upper Cretaceous to Lower Tertiary), fluvial terraces and eolian silt mantles (Pliocene and Pleistocene), and Holocene floodplains associated with the current drainage network of the area. The Mississippi Embayment fill overlies Paleozoic sedimentary rocks (Ervin and McGinnis 1975; Hildenbrand et al. 1982; Thomas 1989).

Land use and land cover changes across the study area have been dramatic with bottomland forests and cypress swamps dominating the pre-settlement landscape of the 1800s. Currently, agriculture dominates the land use with much of the vegetative cover removed to support the agricultural economy. Since 1970, land-leveling for agricultural purposes has significantly altered portions of the landscape. In addition, the 1993 flood scoured approximately 1.3 km^2 (0.5-mi^2) of the study area to a depth of 27 m (90-ft.) near a break in the Fayville levee in the western portion of the study area. Sand was deposited in a discontinuous sheet for over a mile to the east of the scour point (Stephens 1995). Much of this sand has been pushed into mounds by local farmers.



Index map of geomorphic investigation sites. B = Bonneville property site; FI = Forrest Ice property site; PF = Pecord Field (Giddings Core #2) site; SF = Schwartz Field (Giddings Core #3) site; SRC = Schindler Road Cemetery (Giddings Core #1) site; W = Williams property site; WR = Watson Road site. Regional map from Saucier (1994). Heavy line denotes margin of Mississippi Embayment.

Figure 9. Index map of geomorphic investigation sites.

Elevation varies approximately 10 m (30-ft.) within the study area, generally rising from the southeast to the northwest (Figure 10). Arcuate sand ridges, termed "meander scrolls," dominate the geomorphology of Dogtooth Bend. During high-flow conditions, erosion of the outer banks of bends in the river causes the channel to migrate toward the outer banks, and point bar sand is deposited in the arcuate ridges parallel to the inside of the bends. Clay is subsequently deposited by flood slackwater in the swales between sand ridges. Meander scrolls in the study area record several episodes of river migration, including significant historic migration. Two prominent scarps separate the area into three terrace levels (Figure 11): an "early" Holocene terrace abandoned as the active meander belt of the river ~ 8,000 years ago; a "middle" Holocene terrace active from ~ 8,000 to 7,000 years ago; and a "late" Holocene terrace active from ~1,000 to 200 years ago. The "late" Holocene surface is the same elevation as, and continuous with, the historic meander scroll surface on its southeast end (Figure 11). (The terms "early, middle, and late" are used informally herein to subdivide the Holocene.)

The Quaternary geologic map of this region in Saucier (1994) shows all of the Dogtooth Bend study area as part of "Hpm1," denoting the youngest Holocene meander belt point bar deposits in the LMV, but radiocarbon and archaeological age constraints on the "middle" and "early" Holocene surfaces on Figure 11 preclude a late Holocene age. A minimum radiocarbon age of 6960 RCYBP was obtained from channel fill material collected from an abandoned channel on the "early" Holocene terrace (Koldehoff and Wagner 2002), and archaeological materials collected from the "middle" Holocene terrace indicate ages as early as 7000 RCYBP (Stephens 1995).

Published sub-alluvial surface maps of the LMV (Saucier 1994) indicate that alluvial thickness varies from approximately 17 m (55-ft.) to 20 m (65-ft.) from north to south beneath the study area, but samples from a well within Dogtooth Bend show alluvium to 67 m (205-ft.) locally (Pryor and Ross 1962). Beneath the river alluvium, the Paleocene (65 to 55 million years ago) Midway marine shale subcrops in the north of the study area, and the Early Eocene (55 to 50 million years ago) Wilcox deltaic sand subcrops in the south (Saucier 1994).

Of note is the elevation trend of the Mississippi River water surface on the digital elevation model (Figure 10). The water surface rises downstream along the river reach adjacent to the western margin of the study area and then returns to a downstream descent. It is unlikely that this systematic bulge in the river surface is an artifact within the elevation model. This river surface high occurs at the point of the break in the Fayville levee during the 1993 flood. This bulge may be due to an erosionally-resistant bedrock high in the channel bottom causing the water to ramp over it as it passes. Paleozoic bedrock crops out at Thebes Gap, only 4 km upstream from this river surface high, and so it is not unexpected that a stratum of relatively resistant rock may extend upward into the bottom of the river channel. Alternatively, this bulge may be due to active ground warping. The 1895 magnitude 6.2 Charleston, Missouri earthquake occurred approximately 15 km south of this bulge (Hopper and Algermissen 1980). However, we observed no evidence, such as liquefaction features, characteristic of strong seismicity in our trench excavations or cores.

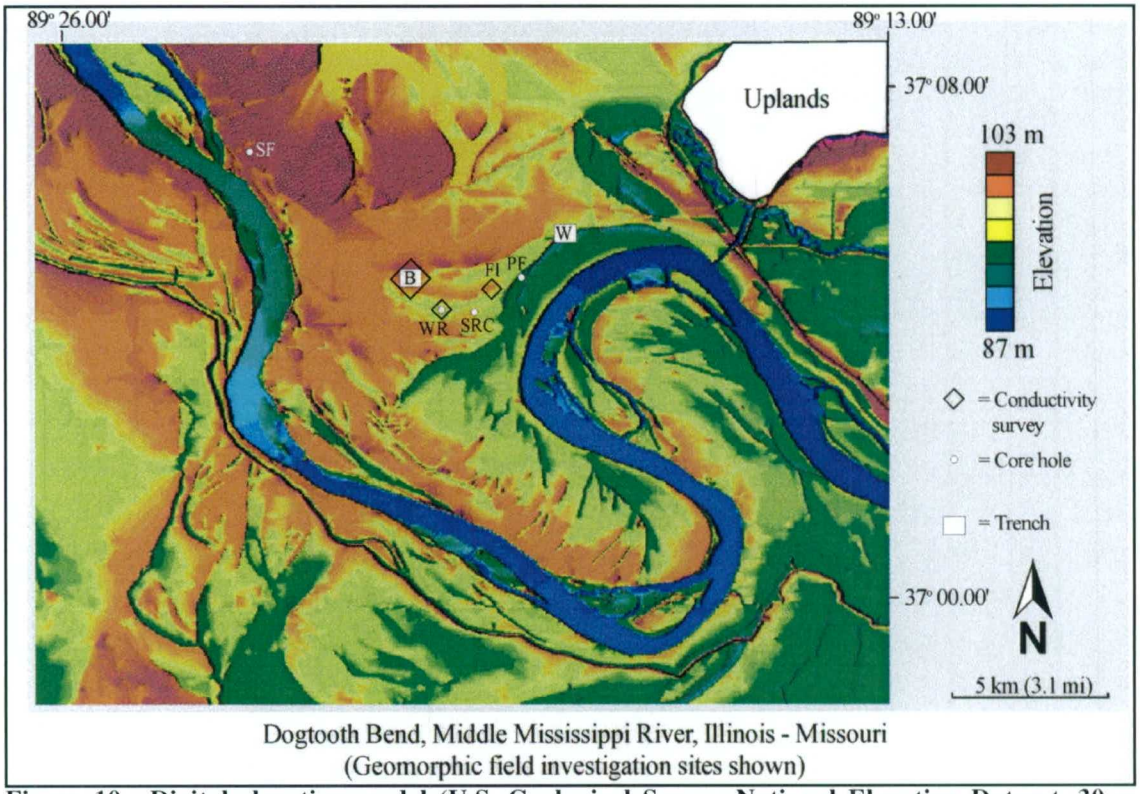


Figure 10. Digital elevation model (U.S. Geological Survey National Elevation Dataset, 30-m resolution) of the study area (see Figure 9 for site names)

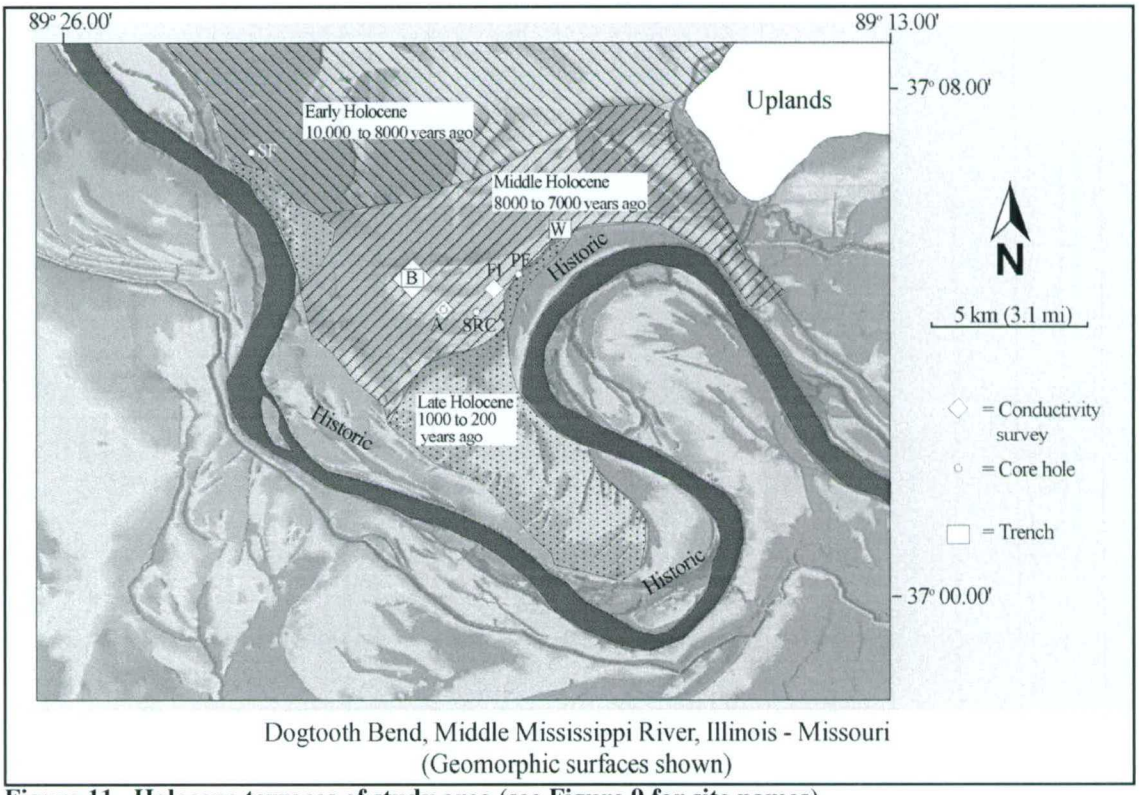


Figure 11. Holocene terraces of study area (see Figure 9 for site names).

SOILS

Due to the age of the surfaces, soil horizons are more developed on the early Holocene terrace in the north of the study area and least developed on the late Holocene surface in the south. Soil series characteristic of the early Holocene terrace and better-drained parts of the middle Holocene terrace are Alvin fine sandy loam and Lamont fine sandy loam on meander scroll sand ridges and Karnak silty clay and Milbrook silt loam in swales between ridges (Parks and Fehrenbacher 1968). Soil series common on the late Holocene surface and on poorly-drained parts of the middle Holocene terrace are Landes fine sandy loam on meander scroll ridges and Darwin silty clay in swales between ridges and in broad low areas.

SITE DESCRIPTIONS AND FINDINGS

Geomorphic field investigation sites were selected to represent typical landforms and fluvial sedimentary facies of the study area and on the basis of accessibility. Much of the western part of the study area is either deeply scoured by 1993 floodwaters or the landforms are buried by sand redeposited by the floodwaters. Therefore, most of our field investigation sites were located in the eastern part of the study area. These sites were selected to describe channel bank settings, meander scroll ridge/swale transitions, and broad terrace depressions.

BONNEFIELD SITE (B).

On interpretation of the topographic map, digital elevation model, and aerial photography, this site was selected on the middle Holocene terrace as a typical meander scroll ridge-to-swale transition. First, an electrical conductivity survey was conducted to map the distribution of near-surface sand and clay sediments (Figure 12). The conductivity map suggests an abrupt change from a sand ridge facies to a clay swale facies from north to south. Based on the results of the survey, two exploratory holes were drilled by hand auger to 2.5-m depth to confirm the conductivity results. Exploratory hole #1 (Table 1 and northern core hole on Figure 13) was drilled in the transition zone and penetrated 1.65 m of clay before encountering sand, consistent with slackwater clay deposits over point bar sand at the base of a meander scroll ridge. Exploratory hole #2 (Table 2 and southern core hole on Figure 13) encountered only clay of the swale fill.

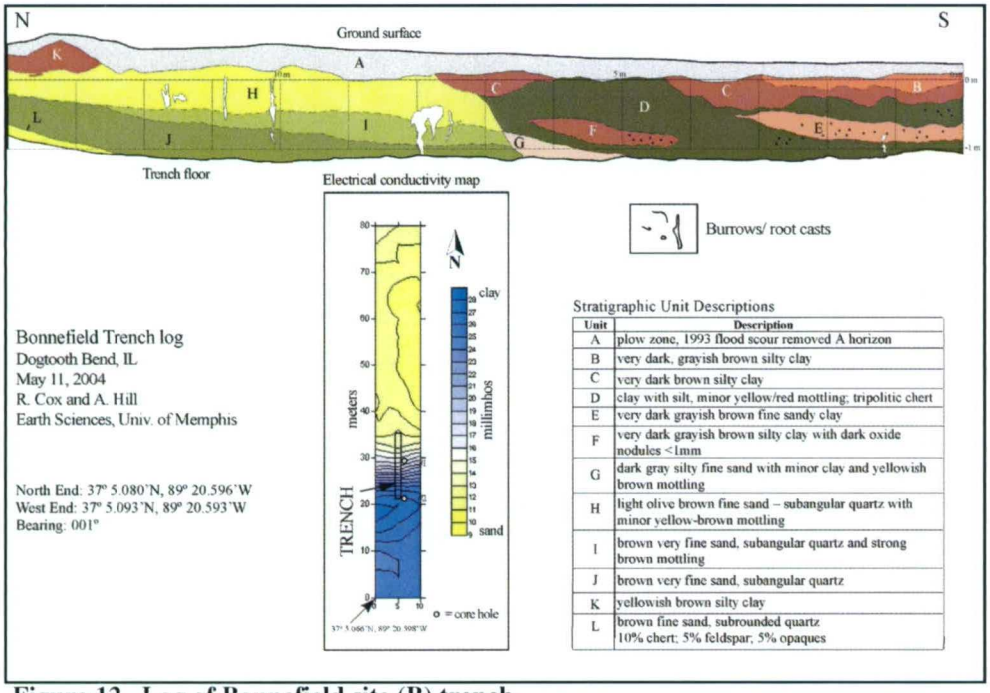
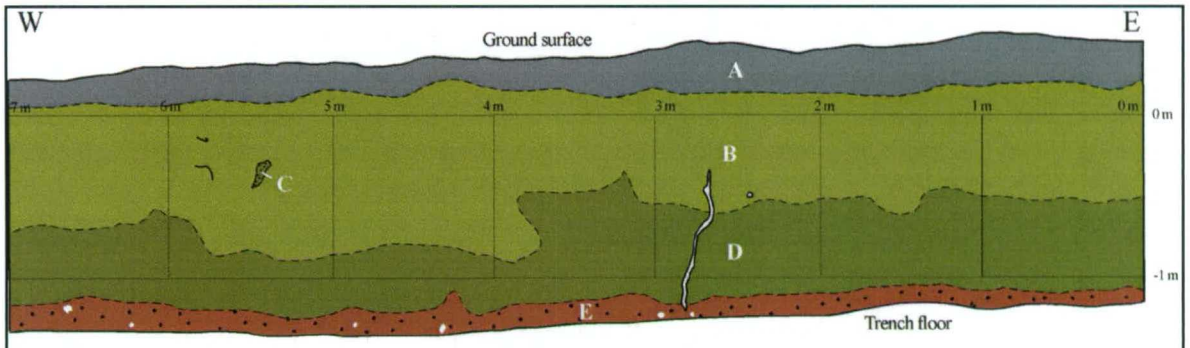


Figure 12. Log of Bonnefield site (B) trench.

A 14-m long trench was excavated by trackhoe north-south across the steepest gradient on the conductivity map. The trench revealed this gradient to be an abrupt facies change from ridge sand to swale clay from north to south (Figure 13). The ridge facies is fine to very fine sub-angular brown quartz sand with minor (≤ 10 percent) chert and opaques ≤ 1 mm in size, and minor clay laminae (Table 3). The swale facies is dark grayish brown silty clay with minor oxide nodules < 1 mm. The soil A-horizon had been scoured away at this site by 1993 floodwaters. The sediments exposed in this trench should be typical of those underlying ridge-swale meander scroll topography throughout the study area.

WILLIAMS SITE (W).

This site was selected to characterize a channel margin setting. A 7-m long trench was excavated by trackhoe on the middle Holocene terrace adjacent to the outer bank of a late Holocene channel. In addition, the ca. 1900 historic river position is to the southeast in close proximity to this site. The trench revealed olive brown clay and fine sandy clay with $CaCO_3$ nodules < 4 cm in size and minor oxide nodules < 2 mm (Table 4; Figure 14). An A_O soil horizon is present at this locality indicating no scouring by floodwaters. It is not clear why natural levee sands and silts are absent at this site. These clay horizons are interpreted to be overbank slackwater flood deposits of late(?) Holocene age. It is also not clear why the river channel migrated away from this site toward the inside of the meander bend during historic times (see Figure 11).



Williams Trench log
Dogtooth Bend, IL
May 12, 2004
R. Cox and A. Hill
Earth Sciences, Univ. of Memphis

East End: 37° 5.694'N, 89° 18.108'W
West End: under heavy tree canopy
Bearing: 243°

Burrows/ root casts

Stratigraphic Unit Descriptions

Unit	Description
A	very dark gray silty clay A_O Horizon; blocky peds
B	light olive brown clay
C	olive brown fine sandy clay
D	olive brown very fine sandy clay with abundant subangular quartz sand and brown mottling
E	brown clay with $CaCO_3$ nodules <4cm; oxide nodules <2mm; and brown mottling

Figure 13. Log of Williams site (W) trench.

SCHINDLER ROAD CEMETERY SITE (SRC).

Giddings rig push-core #1 was drilled to a depth of 3.7 m at this site to describe the sedimentary units on a relatively flat part of the middle Holocene terrace not characterized by prominent ridges or swales. Below a thin veneer of 1993 flood sand, ~0.5 m of reddish black clay was encountered with a weak A_O soil horizon (Table 5). To approximately 1-m depth, a B-horizon is developed in alternating beds of reddish-gray silty clay and dark gray very fine sand. Beds of similar silty clays and sands without soil development alternate to the bottom of the hole. We interpret these sediments as repeating sequences of current-deposited flood sands and slackwater flood clays.

PECORD FIELD SITE (PF).

Giddings core #2 was drilled to approximately 8.5-m depth to characterize sediments of the late Holocene surface. This core was collected from a filled channel adjacent to the scarp rising from the late Holocene surface to the middle Holocene surface, near and topographically below the Williams trench site on the crest of the scarp. Pale brown sand with clay laminations and an A_O horizon was observed to approximately 2.5-m depth (Table 6). We interpret this sandy interval to be natural levee deposits from historic river channels ca. 1820 to 1900 or the modern river channel in close proximity to the southeast (Figure 11). Dark gray to brown clay horizons with minor beds and laminations of sand and silt were found from 2.5 m to the base of the core. These clay-rich strata are typical of fill sediments deposited in an abandoned channel, and we interpret them as prehistoric late Holocene in age.

SCHWARTZ FIELD SITE (SF).

Giddings core #3 (Table 7) was drilled on the early Holocene terrace surface to a depth of 5 m. This site occupies a subtle ridge of typical meander scroll topography. A-horizon soil is present to approximately 3-m depth and may represent overprinting of modern soil and a paleosol. Yellowish to reddish brown beds of fine sand with occasional interbeds of clay characterize the entire core, consistent with a point bar sand sequence.

WATSON ROAD SITE (WR).

This site was evaluated as a potential trenching site to describe the meander scroll stratigraphy of the middle Holocene terrace. We collected electrical conductivity data and hand augered an exploratory hole. The electrical conductivity strip map of the site (Figure 14) suggested by north-to-south change from clay-rich overbank facies typical of a filled swale to sand-rich ridge facies. The exploratory hole was drilled to approximately 2.5 m and revealed a sandy loam A-horizon above dark gray to dark brown clay characteristic of swale fill (Table 8). The presence of A-horizon soil at this site makes it superior to the scoured Bonnefield site as a trenching location to describe meander scroll sediments, but access for trenching was not given by the farmer.

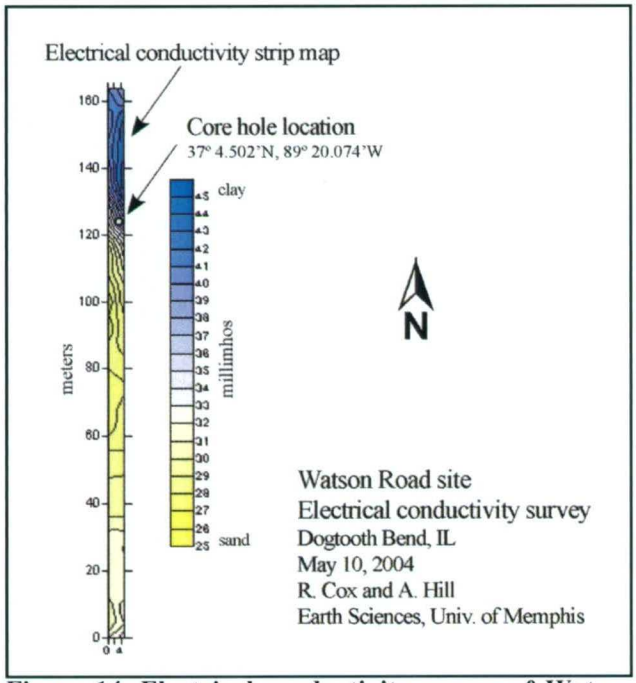


Figure 14. Electrical conductivity survey of Watson Road site (WR).

FORREST ICE SITE (FI).

As at the Watson Road site, we collected electrical conductivity data at this site to assess it as a trenching target to observe meander scroll stratigraphic relationships on the middle Holocene terrace. Again, the conductivity strip map (Figure 15) suggests a strong change from sand ridge facies to swale fill clay facies across a drop in elevation of approximately 2 m. Unfortunately, we were not granted permission to drill exploratory holes or to excavate a trench at this site.

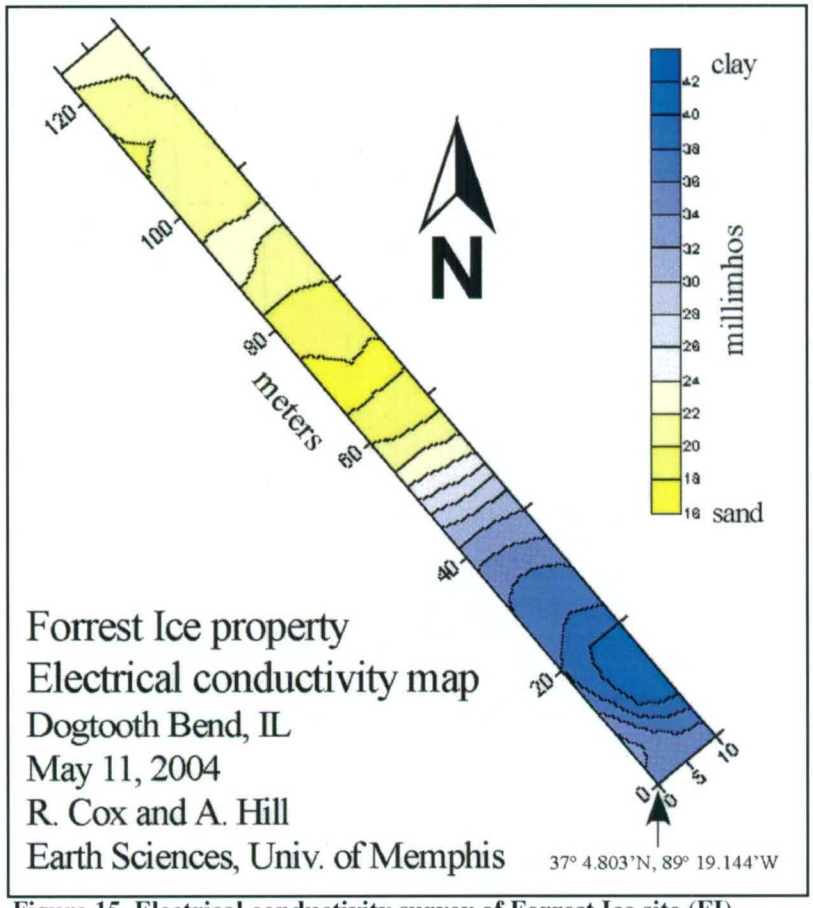


Figure 15. Electrical conductivity survey of Forrest Ice site (FI).

SUMMARY OF INVESTIGATED SITES

Collectively, the results from these investigation sites are consistent with point bar accretion during Mississippi River meander migrations spanning the Holocene. The geomorphology is dominated by arcuate sand ridges and swales. Point bar sands are covered in swales by veneers of overbank silts and clays deposited by flood slackwater. Also present in the study area are natural levee sands and silts adjacent to abandoned channel segments, and local silt/clay-rich abandoned channel fills. These levee and channel deposits occur primarily along the margin of the late Holocene surface adjacent to the middle Holocene terrace scarp (for example, Lake Milligan and Grand Lake are incompletely filled late Holocene channels) and in association with a large early Holocene abandoned meander loop (Horseshoe Lake) on the upper terrace in the north of the study area. In the western portion of the proposed floodway, deep flood scouring at the levee break in 1993 removed much of a filled late Holocene channel (now covered in rip-rap stone) and associated point bar sands (redeposited in the west-central part of the proposed floodway).

SEDIMENT DESCRIPTION TABLES

EXPLORATORY HOLE #1: BONNEFIELD PROPERTY

Coordinates: 37° 5.089'N, 89° 20.60'W
Total depth of core: 2.46 meters

Table 1. Stratigraphic Unit Descriptions.

Unit & Depth	Munsell Color	Description
I 0-30cm	10YR 3/3	Silty clay loam A horizon scoured away by 1993 flood.
II 30-60 cm	10YR 2/2	Silty clay loam
III 60-83cm	10YR 4/2 10YR 5/8	Silty clay loam mottles – 10%, increasing mottling with depth.
IV 83-90cm	10YR 4/2	Clay- and organic-rich silt
V 90-165cm	10YR 4/2	Clayey silt 2% tripolitic chert 1% chert gravel < 3cm
VI 165-210cm	10 YR 3/3	Fine sandy silt
VII 210-228cm	10 YR 3/3	Medium sand, rounded quartz sand, very well sorted
VIII 228-246cm	10 YR 3/3	Fine sand

EXPLORATORY HOLE #2: BONNEFIELD PROPERTY

Coordinates: 37° 5.08'N, 89° 20.596'W
Total depth of core: 2.5 meters

Table 2. Stratigraphic Unit Descriptions.

Unit & Depth	Munsell Color	Description
I 0-45cm	2.5YR 5/2	Silty clay A horizon scoured away by 1993 flood.
II 45-65 cm	10YR 5/2 5YR 5/8	Silty clay loam mottles- 10%
III 65-170cm	10YR 4/2 10YR 4/6	Clay mottles – 20%
IV 170-180cm	10YR 4/2 10YR 4/6	Clay 2% tripolitic chert mottles – 25%
V 180-250cm	10YR 4/2 10YR 4/6	Clayey silt mottles – 30%

BONNEFIELD TRENCH

North End: 37° 5.080'N 89° 20.596'W (at auger hole #2)
South End: 37° 5.093'N 89° 20.593'W

Table 3. Stratigraphic Unit Descriptions.

Unit	Munsell Color	Description
A	-	Plow zone; 1993 flood scour removed A horizon
B	10YR 3/2	silty clay very dark, grayish brown
C	10YR 2/2	silty clay very dark brown
D	10YR 4/3	clay with silt, minor yellow/red mottling; tripolitic chert
E	10YR 3/2	fine sandy clay with minor dark oxide nodules < 1mm very dark grayish brown
F	10 YR 3/2	silty clay with dark oxide nodules <1mm very dark grayish brown
G	10 YR 4/1 10 YR 5/6	silty fine sand with minor clay dark gray mottling yellowish brown
H	2.5Y 5/3	fine sand – subangular quartz light olive brown minor yellow-brown mottling
I	10 YR 5/3 7.5YR 5/6	very fine sand, subangular quartz brown with minor opaques and minor oxide nodules <1m mottling strong brown
J	10YR 5/3	very fine sand, subangular quartz brown with minor opaques and mica oxide nodules =1mm
K	10YR 5/4	silty clay yellowish brown
L	10YR 4/3	fine sand, subrounded quartz brown 10% chert 5% feldspar 5% opaques

WILLIAMS TRENCH

East End: 37° 5.694'N 89° 18.108'W
West End: under heavy tree canopy
Bearing: 243°

Table 4. Stratigraphic Unit Descriptions.

Unit	Munsell Color	Description
A	10YR 3/1	silty clay very dark gray blocky peds A_0 Horizon
B	2.5YR 5/3	clay light olive brown
C	2.5YR 4/3	fine sandy clay olive brown

Table 4, continued

Unit	Munsell Color	Description
D	10YR 4/3	very fine sandy clay with abundant subangular quartz sand minor opaques
		olive brown
	7.5YR 5/8	mottling
		brown
E	10YR 4/3	clay
		brown
	7.5YR5/8	mottling
		brown
F	10YR 4/3	clay with $CaCO_3$ nodules <4cm and oxide nodules <2mm
		brown
	7.5YR5/8	mottling
		brown

GIDDINGS CORE #1: SCHENDLER ROAD CEMETERY (SRC)

Coordinates: 37° 4.466'N 89° 19.527'W
Total depth of hole: 3.7 meters (2.57 to 3.7 meters no recovery)

Table 5. Stratigraphic Unit Descriptions.

Unit & Depth	Munsell Color	Description
I	10YR 5/3	Fine sand, subrounded, quartz sand
		3% black mica (?biotite)
		1% chert
0-12cm		Note: 1993 Flood Sand
II	2.5YR 2.5/1	Very fine clay
		weak soil structure
12-42 cm		A-O
III	7.5YR 4/1	Silty clay
		fine blocky structure increasing to medium with depth
42-56cm	7.5YR 4/4	mottles–1%
IV	7.5YR 4/1	Very fine sand
		Medium blocky structure
	10YR 5/8	5% mottles reddish brown and gray
56-69cm	10YR 6/2	
V	2.5 YR 5/1	Silty-clay matrix
		Medium blocky structure increasing to coarse with depth
		Very fine clay clasts suspended in matrix
	7.5YR 4/1	Mottles increasing in size & frequency with depth to 5%
69-92cm	10YR 4/6	
	10 YR 4/1	
VI	7.5 YR 5/1	Silty clay
		Sand content increasing with depth, subangular
92-125cm	10 YR 4/6	Mottles decrease from 2% to 0 at base of 4'section.
VII	10YR 7/4	Sand, rounded quartz sand, very well sorted
		7% black mica
		2% chert
125-173cm	7.5 YR 4/1	Clay clasts ~5mm
VIII	7.5 YR 6/2	Sand, rounded quartz, well sorted
		5% black mica
		1% chert
173-181cm	7.5 YR 4/1	Clay clasts ~2.5mm

Table 5, continued

Unit & Depth	Munsell Color	Description
IX 181-182cm	7.5 YR 4/1	Silty clay No structure
X 182-198cm	7.5 YR 6/2	Sand, rounded quartz, well sorted 5% black mica 1% chert
XI 198-227cm	7.5 YR 6/2	Sand Silty clay clasts >5mm
XII 227-257cm	7.5 YR 6/1 7.5 YR 6/6	Silty-clay with fine blocky structure 1-2% mottles decreasing to 0% at base
257cm-base		No recovery

GIDDINGS CORE #2: PECORD FIELD (PF)

Coordinates: 37° 5.090'N 89° 18.745'W
Total depth of core: 8.6 meters

Table 6. Stratigraphic Unit Descriptions.

Unit & Depth	Munsell Color	Description
I 0-26cm	10YR 5/3	Silty sand, subangular, very fine quartz O-A with roots and organic matter
II 26-77cm	10YR 6/3	Sand, very fine, rounded, quartz 3% chert 1% black mica
III 77-115cm	10YR 6/2 10YR 3/1 10YR 5/3	Fine laminated sand Clay laminations (thin ribbons at 89, 96, 112 cm) ~2mm Fine sand at base
IV 115-138cm	10YR 6/3	Quartz sand, subrounded <1% black mica ~2% chert
V b138-240cm	10YR 6/3	Quartz sand, subrounded (same as above only very wet) <1% black mica ~2% chert
VI 240-318cm	2.5Y 3/1	Sandy-clay Soaking wet – sand content decreasing with depth No structure
VII 318-327cm	10YR 3/1	Clay with little sand, sand content decreasing w/ depth Boundary is moisture controlled – dry below 318cm
VIII 327-358cm	7.5YR 2.5/1	Clay fine to medium blocky structure very low moisture content
IX 358-415cm	7.5YR 4/4 7.5YR 3/1	Silty sand wet Clay clasts 1-3mm (1% increasing to 3% at unit base) No structure No mottling
X 415-433cm	7.5YR 4/1 7.5YR 4/4	Silty clay Not structure mottling
XI 433-457cm	7.5YR 2.5/1 7.5YR 4/1	Clay mottles
XII 457-481cm	5YR 3/1	Clay Medium to coarse blocky structure

Table 6, continued

Unit & Depth	Munsell Color	Description
XIII 481-516cm	7.5YR 4/1	Sandy clay Very wet – no structure (sand contamination from above?)
XIV 516-604cm	7.5YR 3/1 10YR 6/4 10YR 6/6	Clay Silt laminations – 1-2mm throughout unit
XV 604-668cm	7.5YR 3/1 2.5YR 2.5/1	Clay with silt – wet with no structure Some laminations
XVI 668-682cm	7.5YR 3/1 7.5YR 4/4	Clay with no silt Mottles
XVII 682-854cm	10YR 3/2	Clay
XVIII 854cm-base	7.5YR 4/1 7/5YR 4/4	Sandy-silty clay Fine blocky structure Black mica 3% mottles

GIDDINGS CORE #3: SCHWARTZ FIELD (SF)

Coordinates: 37° 6.959'N 89° 23.051'W
Total depth of core: 5 meters

Table 7. Stratigraphic Unit Descriptions.

Unit & Depth	Munsell Color	Description
I 0-43cm	10YR 3/2	Clayey fine sand Weak, fine blocky structure Bottom 15cms – charcoal, gravel and glass
II 43-193cm	10YR 4/3	Clayey fine sand (more clay than above) Weak, fine blocky structure Subrounded quartz
III 193-184cm	10YR 4/3	Fine sand, subrounded quartz Minor opaques <5% No structure, wet
IV 184-198cm	10YR 4/4 10YR 6/8	Clay Fine blocky structure Slight mottling
V 198-209cm	10YR 4/4	Very fine sand, subrounded quartz Fine blocky structure
VI 209-219cm	10YR 5/3	Clay with fine laminations Platy structure
VII 219-240cm	10YR 4/4	Very fine sand, subangular quartz with 5% chert No structure
VIII 240-274cm	10YR 4/4 2.5YR 4/4	Fine sand, subangular quartz with 5% chert Mottles – 10%
IX 274-280cm	10YR 4/4	Clayey fine sand, subangular quartz Weak platy structure
X 280-297cm	10YR 5/4	Fine clayey sand, subangular quartz Weak platy structure
XI 297-369cm	2.5Y 4/3	Laminated, very fine sand, subangular quartz With minor opaques <5% and 5% chert Crossbeds
XII 369-403cm	2.5Y 3/3	Fine sand, subangular 5% opaques, 5% chert

Table 7, continued

Unit & Depth	Munsell Color	Description
XII 403-490cm	2.5Y 4/3	Very fine sand, subrounded Fine blocky structure wet
XIII 490cm-base	10YR 3/6	Very fine sand, rounded quartz 10% opaques no structure wet

EXPLORATORY HOLE: WATSON ROAD SITE (WR)

Coordinates: 37° 4.502'N, 89° 20.074'W
Total depth of core: 2.46 meters

Table 8. Stratigraphic Unit Descriptions.

Unit & Depth	Munsell Color	Description
I 0-10cm	10YR 3/1	Loam A horizon.
II 10-30 cm	10YR 3/2 10YR 2/2	Sandy loam, A-horizon mottles with clay
III 30-61cm	10YR 2/2	Clay loam
IV 61-105cm	10YR 3/1 7.5YR 4/4	Clay mottles
V 105-117cm	7.5YR 2.5/1	Clay
VI 117-214cm	10 YR 3/1 7.5YR 4/4	Clay minor mottling
VII 214-246cm	10 YR 3/1 7.5YR 4/4	Silty clay mottles; wood fragment @ 230cm depth.

7. FIELD RESULTS

BY ERIC S. ALBERTSON

Archaeological field investigations were carried out with a crew of four to five technicians and the field director between April 16 and May 29, 2004. During that period, seven previously recorded sites (11AX100, 11AX341, 11AX361, 11AX368, 11AX375, 11AX376, and 11AX412) were revisited. A total of 47 newly recorded sites (11AX562-11AX608) were also identified during the study. One additional site, designated FN2, was not assigned a trinomial by the ISM State Site File Manager. This site overlapped with five previously recorded sites (11AX93, 11AX385, 11AX386, 11AX388, and 11AX390). ISM personnel did not wish to combine all five previously recorded sites under a single trinomial.

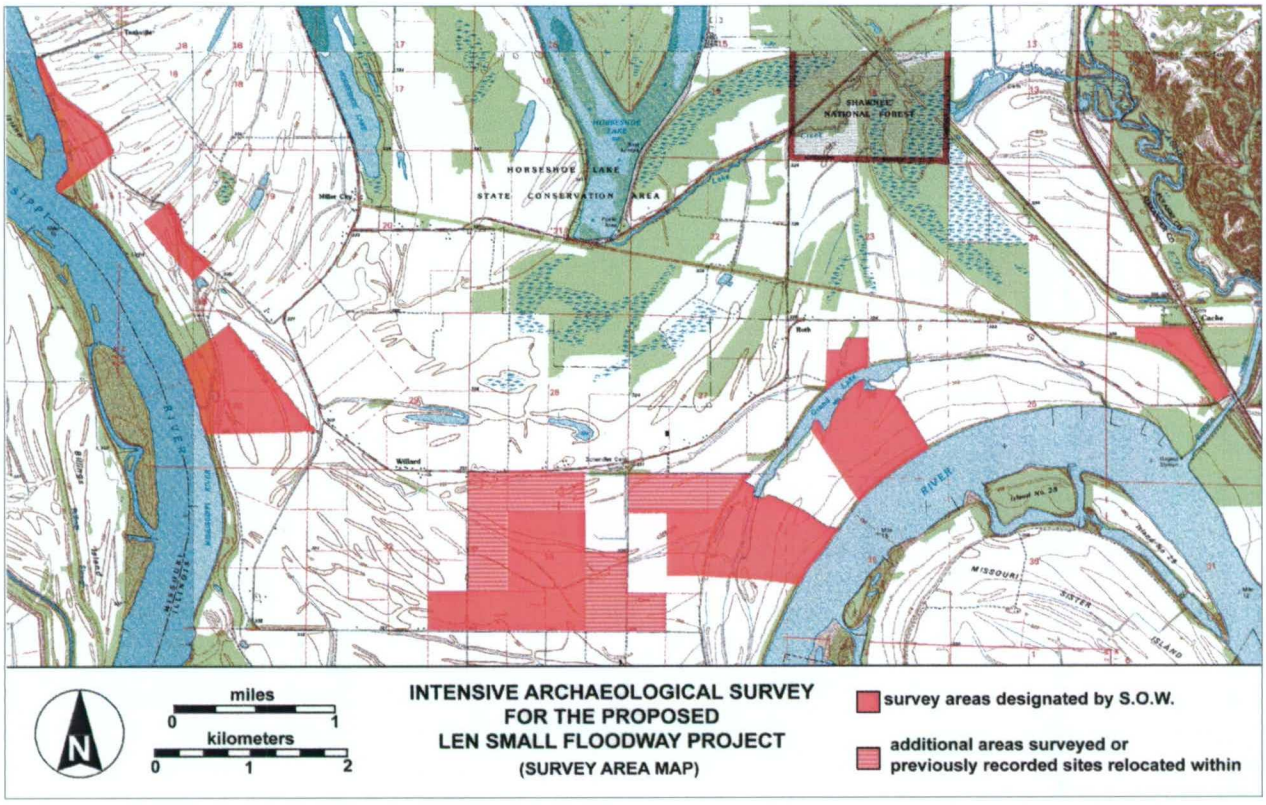


Figure 16. Survey area map of the proposed Len Small Floodway (base maps: 1993 Cache and Thebes SW USGS 7.5-min. quadrangle sheets).

In the interest of site protection, the location of all sites investigated during the present study is provided in a removable map-pack format in the back of this report. Please note that publicly distributed copies of this document will not contain the latter locational reference.

RE-VISITED SITES

11AX100 (FIELD NO. 43)

Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....160 m^2 (20 m N–S × 10 m E–W)
Topographic Setting.....North Face of Low, SW–NE Trending Ridge
Elevation ..... 325-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions..No-till, Young Winter Wheat Planted Over Corn Stalks; 50 Percent Visibility

Site Description

Site 11AX100 was originally recorded in 1974 and revisited in 1993 by Stephens' (1995) crew. Stephens was able to discern two artifact concentrations within the site and recovered a total of 130 prehistoric artifacts and a single historic sherd. Diagnostic artifacts from the Late Archaic, Early Woodland, Late Woodland, Mississippian, and mid to late-nineteenth century were recovered. The site reportedly covered an area of approximately 16,000 m^2 in 1993. Considered an open habitation during the earlier prehistoric periods, Stephens (1995:54-55) suggested the site served as a farmstead during the Mississippian Stage. The site was ranked as a "moderate priority" site with regards to further research potential (Stephens 1995:Table 5-11). Another possible farmstead (11AX370) was reported to the northeast of 11AX100 on a paralleling ridge (Stephens 1995:54-55).

When revisited in 2004, little evidence for this once reportedly extensive site could be discerned. In fact, only four artifacts were observed/collected (Table 9). These artifacts were collected in what appears to be Stephen's (1995:54) "Area A." As opposed to the earlier collection at the site, the 2004 visit produced only lithics. All were non-diagnostic. Recall, Stephens (1995:55) recovered nine Woodland and Mississippian sherds and three pieces of daub.

Comparing past and present studies at 11AX100, a dramatic difference in observations at the site are immediately evident. Stephens (1995:Table 5-10) indicates that when the site was revisited in 1995, no disturbances associated with the 1993 flood episode were evident at 11AX100. Thus, it appears the only explanation for the presently observed site, which is greatly diminished in size and artifact density from previous reports is attributable to near total collection by Stephen's crew during the 1993 survey. Regardless, at present the site appears to hold little in the way of future research potential. This recommendation should be confirmed via shovel testing (not permitted during the present study) to ensure no-till agriculture is not masking a remaining substantial scatter or deposit similar to that observed by Stephens in 1993.

Table 9. Artifact Assemblage Recovered from 11AX100.

Artifact Category	Comments	n=
tertiary biface	probable PP/K distal	1
primary biface	small	1
secondary flake		1
tertiary flake		1
	Total:	**4**

11AX341 (FIELD NO. 83)

Site Type(s).....Lithic Scatter
Component(s).....Late Archaic-Early Woodland (Possible Earlier Component Also)
Approximate Area.....12,600 m^2 (200 m N–S × 80 m E–W)
Topographic Setting.....Western Face of Low Ridge
Elevation.....320-ft. NGVD
Soil Association.....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field; 100 Percent Visibility

Site Description

Site 11AX341 was originally recorded in December of 1994 by the CAL during a Soil Conservation Service ditch repair survey. The site reportedly covered 5,204 m^2 at that time. Although surface visibility was limited to only 30 percent, a total of 54 individually counted artifacts were recovered during the 1994 survey. A concentration of artifacts was noted in the north and central portions of the site. The only chipped-stone tool recovered was a uniface with the remainder of the assemblage consisting of debitage. No diagnostic materials were recovered.

When revisited during the present study, collecting conditions were ideal at site 11AX341. As a result, it is not surprising the site as now defined is much larger than originally thought; nearly two and a half times larger. A total of 53 artifacts were recovered during the present study (Table 10). A great number more were observed but not collected. Similar to the previous researchers, we also observed an artifact concentration in the north and central portion of the site. A third concentration was noted at the extreme southern margin of the site as well, directly along the wooded top bank of Grand Lake. The recovered assemblage exhibited a wide range in morphological variability. Primarily comprised of flake debitage, the assemblage also included numerous cores, several bifaces, a hammerstone, and a variety of scrapers. Two PP/Ks were also recovered. One of the latter was assigned to the Dickson Cluster (after Justice 1987) indicating a Late Archaic-Early Woodland occupation at the site. An earlier occupation is also possible here based on an untyped broadly expanding stemmed PP/K. The site is interpreted as a prehistoric habitation locus. Occupation of the site appears to have been intensive with a focus on lithic reduction.

Site 11AX341 appears to hold considerable potential for future research. Given the morphological variability in the recovered assemblage and the noted artifact concentration, it appears the site may retain good depositional integrity. In terms of significant research potential, this site is one of the better locations visited during the study.

Table 10. Artifact Assemblage Recovered from 11AX341.

Artifact Category	Comments	n=
bifacial thinning flake	fragment	1
cobble core		2
core fragment		2
core trimming flake		1
exhausted core		1
FCR		1
flake fragment		20
hammer stone	small pebble	1
PP/K fragment, untyped broad expanding stemmed		1
PP/K, Dickson Cluster (Little Bear Creek to small Adena)		1
secondary biface	possible adze	1

Table 10, continued

Artifact Category	Comments	n=
secondary biface fragment		6
unifacial scraper		4
spokeshave		1
tertiary flake		7
untyped scraper		2
utilized flake		1
	Total:	**53**

11AX361 (FIELD NO. 19)

Site Type(s).....Historic Homesite and Prehistoric Isolate
Component(s)..... Late-nineteenth–Mid-twentieth Century and Undifferentiated Prehistoric
Approximate Area.....2,830 m^2 (60 m N–S × 60 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions..... Rocky Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX361 was originally identified by Stephens (1995) and interpreted as a late-nineteenth to mid-twentieth century historic farmstead. The site was described as being "L-shaped" covering approximately 5,800 m^2 and was divided into two sub-areas. Review of USDA aerial photographs by Stephens (1995:63) revealed a domestic structure and ancillary outbuilding. A total of 126 artifacts were recovered by Stephens' crew, including a number of kitchen ceramics and glass, personal items, and structural artifacts. A possible early-nineteenth century component was identified based on the recovery of 14 pearlware sherds (Stephens 1995:62-63).

During the present study, the site was observed to be only about half as large as reported by Stephens (1995). The observed scatter can be characterized as moderate density. A similar artifact assemblage was recovered although no evidence for an occupation earlier than the late-nineteenth century could be discerned. In total, 44 artifacts were recovered although numerous more were observed and not collected (Table 11). The only prehistoric artifact recovered was an exhausted core indicating limited utilization of this location by prehistoric peoples as well.

Stephens (1995:Table 5-11) asserted that 11AX361 was a low research priority. When revisited in 1995, Stephens (1995:Table 5-10) observed the only impact to the site following the 1993 flood episode was shallow sand deposition. Based on the results of the present study, we would recommend the site be further evaluated via testing or other means prior to the implementation of the proposed floodway project. This recommendation is forwarded on the basis that the site does not appear to be as heavily disturbed as most rural domestic scatters. Although obviously impacted from razing and subsequent cultivation, the observed artifacts are not as heavily fragmented as usual offering further evidence of above average historic preservation here.

Table 11. Artifact Assemblage Recovered from 11AX361.

Artifact Category	Comments	n=
bottle neck	aqua, crown finish	1
bottle neck	amber, patinated, patent finish	1
bottle neck	amethyst, patent finish	1
brick fragment		1
container glass, medicine bottle	clear, small medicine bottle	1
container glass	aqua and clear, base fragments	3

Table 11, continued

Artifact Category	Comments	n=
container glass	amethyst, light green, aqua, and clear	9
exhausted core		1
late refined earthenware	unidentified glaze	1
metal hook		1
stoneware	salt glaze	1
stoneware	unidentified slips	12
whiteware	unidentified partial maker's mark	1
whiteware	plain	10
	Total:	**44**

11AX368 (FIELD NO. 8)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 940 m^2 (40 m N–S × 30 m E–W)
Topographic Setting ..... South Face of Low Ridge
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Planted in Young Winter Wheat; 50 Percent Visibility

Site Description

Site 11AX368 was initially recorded by Stephens in 1993. The site was described as covering slightly more than 12,000 m^2 and produced 302 individually counted artifacts. Artifacts were collected within five sub-areas. Of the 300 plus artifacts, only one diagnostic was recovered by Stephens' crews; an Early Woodland Kramer point. Stephens' recovered assemblage was otherwise dominated by flake debitage (Stephens 1995:69-70). Stephens (1995:Table 5-11) listed this site as a high priority for future archaeological research.

When revisited during the present study, little evidence for the once reportedly extensive 11AX368 was observed. Despite an exhaustive search of the site's area as previously defined, only eight artifacts were recovered. Additionally, these specimens were recovered within an area less than one-tenth of the site's previously reported size. The assemblage from the present study included a biface fragment and numerous pieces of flake debitage (Table 12).

Present observations of 11AX368 and those made by Stephens in 1993 are dramatically different. When revisited by Stephens in 1995, she notes the only impact to the site as a result of the 1993 flood episode was a shallow deposition of sand (Stephens 1995:Table 5-10). Thus it appears that only over-collection of the site by Stephens' crew can account for the dramatically reduced site as presently observed. The site appears to hold little in the way of future research potential. This recommendation should be confirmed via shovel testing (not permitted during the present study) prior to implementation of the proposed floodway project.

Table 12. Artifact Assemblage Recovered from 11AX368.

Artifact Category	Comments	n=
bifacial thinning flake	fragmented, one utilized as spokeshave	2
flake fragment		2
secondary biface fragment	heavily fire-spalled	1
secondary flake		1
tertiary flake		2
	Total:	**8**

11AX375 (FIELD NO. 3)

Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....240 m^2 (30 m N–S × 10 m E–W)
Topographic Setting.....Low, NW–SE Trending Ridge
Elevation ..... 325-ft. NGVD
Soil Association .....Oakville-Lamont-Alvin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX375 was originally recorded by Stephens in 1993. The site was reported to be an extensive, historic and prehistoric scatter measuring approximately 14,000 m^2. The historic component was described as representing a mid-nineteenth to mid-twentieth century homesite. However, a primary occupation during the latter portion of the nineteenth and early to mid-twentieth century was noted. Archival photographs and local informants confirmed the latter assertion. A total of 105 historic artifacts were recovered by Stephens' crew. The latter primarily consisted of ceramics including a pearlware sherd with was the basis for the earlier historic occupation noted above. Other historic materials recovered included abundant container glass, structure-related artifacts, and personal items. The site also contained a prehistoric component assigned to the Mississippian Period based on the recovery of a Mill Creek hoe. A total of 41 prehistoric artifacts were recovered during the 1993 survey (Stephens 1995:78-79). Stephens (1995:Table 5-11) assigned this site a moderate priority regarding future research potential.

When revisited during the present study, only three, widely dispersed prehistoric artifacts were recovered at 11AX375 (Table 13). No historic artifacts were observed. The diminutive prehistoric component included a biface fragment, a scraper, and a piece of debitage. None of the artifacts were diagnostic. All three items were recovered from an area about one percent of the site size described originally by Stephens (1995:78).

Again, as was the case with sites 11AX100, 11AX368, and 11AX375 appears dramatically different than initially observed by Stephens. Stephens (1995:Table 5-10) notes the only observed post-1993 flood disturbance to the site was shallow sand deposition. Thus it appears that only over collections of the site by Stephens' crew can account for the dramatically reduced site in terms of areal extent and artifact density as presently observed. Regardless, at present the site appears to hold little in the way of future research potential.

Table 13. Artifact Assemblage Recovered from 11AX375.

Artifact Category	Comments	n=
primary biface fragment		1
secondary flake		1
unifacial scraper		1
	Total:	**3**

11AX376 (FIELD NO. 4)

Site Type(s).....Isolated Find
Component(s).....Undifferentiated Prehistoric
Approximate Area.....1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 325-ft. NGVD
Soil Association .....Oakville-Lamont-Alvin
Survey Conditions..... Rocky Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX376 was originally identified by Stephens in 1993. It was described as a large (approximately 10,300 m^2) open habitation with Late Archaic, Early Woodland, Mississippian, and late nineteenth to mid-twentieth century historic components present. A total of 47 artifacts were collected from the site, 43 of which were prehistoric (Stephens 1995:79-80). Stephens (1995:Table 5-11) ranked the research potential of the site as low.

When revisited during the present study only one artifact, a crude scraper, was recovered within the bounds of 11AX376 as defined by Stephens (1995). Despite a thorough search of the field under ideal collecting conditions, no additional cultural materials were observed (Table 14). A vast amount of unmodified gravels, presumably from the nearby road were scattered across the field at this location.

Stephens (1995:Table 5-10) notes that during a 1995 revisit to the site she observed 1993 flood damage including surface erosion, pitting, and erosional gullies across 11AX376. Based on the findings of the present study it appears these disturbances have essentially destroyed the site. Thus, site 11AX376 holds little if any future research potential.

Table 14. Artifact Assemblage Recovered from 11AX376.

Artifact Category	Comments	n=
untyped scraper		1
	Total:	**1**

11AX412 (FIELD NO. 18)
Site Type(s).....Historic Homesite and Prehistoric Isolate
Component(s).Late-Nineteenth–Mid-Twentieth Century Historic and Undifferentiated Prehistoric
Approximate Area.....2,830 m^2 (60 m N–S × 60 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 325-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX412 was initially recorded by Stephens in 1993. The site was described as a small (approximately 2,500 m^2) habitation and possessed unknown prehistoric and mid-nineteenth to mid-twentieth century components. A total of 49 artifacts were collected, all but one of which were historic. The site was interpreted as a homestead (Stephens 1995:104-105). Stephens (1995:Table 5-11) ranked the research potential of this site as low.

When revisited during the present study, we found the site to be much like originally described by Stephens (1995). Perhaps the only difference is the site is slightly larger. The latter is undoubtedly due to increased scattering of artifacts via plowing and other agricultural practices. Of the 98 historic artifacts collected during the present study, no evidence for an occupation earlier than the late-nineteenth century was identified (Table 15). As was the case with Stephens' original recording, the prehistoric component was represented by only a single specimen during our visit. Stephens (1995:Table 5-10) revisited the site following the flood of 1993 and noted the only disturbance to the site was a shallow deposition of sand. Little other disturbance besides agriculture appears to have occurred in the interim between Stephens last visit and the present study.

Although considered a low research priority by Stephens (1995:Table 5-11) it is our opinion that the site is reasonably well preserved, especially in comparison to other historic homesites identified throughout the Southeast. For that reason, we would assert that the site holds a degree of future research potential. This potential should be further evaluated prior to implementation of the proposed floodway project.

Table 15. Artifact Assemblage Recovered from 11AX412.

Artifact Category	Comments	n=
battery core		1
bottle neck	amethyst, bead finish	1
bottle neck	aqua, crown finish	1
bottle neck	clear, patent finish	1
bottle neck	amethyst and clear, unidentified finish	2
bottle neck	amethyst and clear, wine or brandy finish	7
brick fragment		1
canning seal liner	amethyst glass	1
canning seal liner	"Lined Boyd's Genuine Porcelain"	1
canning seal liner	milk glass	3
container glass	amber and clear	14
cream-colored ware		1
decorated whiteware	brown annular design	1
decorated whiteware	blue transfer print	1
decorated whiteware	bichrome decal	1
decorated ironstone	green transfer print	1
flake fragment		1
flat glass		1
glass stopper	amethyst	1
hammer head	metal claw	1
metal hinge		1
metal saddle horn		1
metal spoon		1
milk glass		1
padlock	"St. Louis"	1
ironstone		1
porcelain		1
porcelain	impressed with word "JAPAN"	1
stoneware	unidentified slip	27
stoneware	Albany slip interior and exterior	2
unidentified metal object		3
whiteware		13
whiteware	partial maker's mark (Homer Laughlin and Co. ca. 1900-1960)	1
whiteware	unidentified partial maker's mark (not an East Liverpool pottery)	2
Total:		**98**

11AX93/11AX385/11AX386/11AX388/11AX390 (Field No. 2)

Site Type(s).....Lithic Scatter
Component(s).....Late Archaic–Early Woodland
Approximate Area.....15,080 m^2 (80 m N–S × 240 m E–W)

Topographic Setting.....Low, NE–SW Trending Ridge
Elevation ..... 325-ft. NGVD
Soil Association .....Oakville-Lamont-Alvin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Field Site No. 2 was recorded during the present study and encompassed a number of sites (see discussion below) previously recorded by Stephens (1995) and other researchers. Although observed to be a contiguous scatter during the present study, artifact concentrations were also observed in locations correlating to the previously defined sites. It thus appears that the 1993 flood episode has combined many of these sites into a single scatter. However, following submission of a site report for Field Site No. 2 to the ISM, the State Site File Manager elected not to combine the sites under a single trinomial. The following justification was offered:

> We elected not to record for FN 02 at this time. The site overlaps with five previously recorded sites, 11AX93, 11AX385, 11AX386, 11AX388, and 11AX390. Given the nature of the disturbance from this area from the 1993 flood, we did not want to combine these five sites into a single site. Your sketch map even mentions artifact concentrations along the ridge, which probably represents the locations of the previously recorded sites. It appears that these five sites have been destroyed by the 1993 flood. We can always re-evaluate this site (FN 02) if additional information becomes available in the future [N. Klobuchar, personal communication, August 2004]

During Stephens' 1993 survey, a total of 857 individually counted artifacts were recovered from the five sites listed above. Components from all cultural periods between the Middle Archaic and Mississippian were identified with the exception of any Late Woodland diagnostics (Stephens 1995). Essentially, these five sites contain the entire range of prehistoric occupation of Dogtooth Bend from the earliest known component to the latest. Future research priorities for the five sites ranged from moderate to low (Stephens 19995:Table 5-11). During Stephens 1995 revisit to the sites, 1993 flood impacts including surface erosion and pitting were noted for most of the sites. Site 11AX388 was judged to be unaffected however (Stephens 1995:Table 5-10).

During the present study a total of 105 artifacts, all prehistoric, was collected (Table 16). Vast numbers of other artifacts (non-diagnostic) were observed across the site(s) but not collected. Diagnostics from the Late Archaic and Early Woodland Periods were recovered along with a number of late stage bifaces, a drill, several scrapers, a core, and abundant flake debitage. Again, many of these artifacts were observed and/or collected in small clusters or larger concentrations suggesting a degree of spatial integrity is retained within the larger scatter.

Thus, although now rendered a contiguous scatter, the five sites collected as Field No. 2 appear to collectively possess a high degree of future research potential. The five sites have not been "destroyed" as asserted by the ISM Site File Manager. This site represents the most artifact rich location we encountered during the present study. The clustering and concentration of artifacts, representative of separate sites or perhaps better now described a separate "nodes" within a larger scatter, warrant additional investigation. Before resigning to the fact that the sites are "destroyed," intensive subsurface evaluation should be made to judge the degree of deposition integrity (if any) retained at this location. For these reasons, we would assert that the sites do hold a degree of future research potential and are potentially eligible for NRHP listing. This potential should be further evaluated prior to implementation of the proposed floodway project.

Table 16. Artifact Assemblage Recovered from 11AX93/11AX385/11AX386/11AX388/11AX390.

Artifact Category	Comments	n=
amorphous core	utilized	1
blade flake		2
flake fragment		55
drill		1
PP/K fragment	untyped expanded (rounded) stemmed	1
PP/K fragment	untyped expanded stemmed?	1
PP/K fragment	untyped straight to slightly contracted stemmed	1
primary biface fragment		5
secondary biface		1
secondary biface fragment		3
secondary flake		3
steep edged scraper	manufactured on a split cobble	1
tertiary biface		2
tertiary biface fragment	several probable PP/K medials	5
untyped scraper		1
	Total:	**105**

11AX562 (Field No. 1)

Site Type(s)..... Lithic Scatter
Component(s)..... Late Archaic
Approximate Area..... 40 m^2 (5 m N–S × 10 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Planted in Young Winter Wheat; 60 Percent Visibility

Site Description

Site 11AX562 is a very low-density scatter of prehistoric lithics (Table 17). The site produced only two artifacts, a PP/K and a flake fragment. The PP/K resembles the Late Archaic Merom type. The site was likely utilized as a transitory hunting camp. Although the site did produce a diagnostic artifact it appears to hold little in the way of future research potential beyond the location and component data presently at hand.

Table 17. Artifact Assemblage Recovered from 11AX562.

Artifact Category	Comments	n=
PP/K	Merom-like	1
flake fragment		1
	Total:	**2**

11AX563 (Field No. 5)

Site Type(s)..... Lithic Scatter
Component(s)..... Woodland (Undifferentiated)
Approximate Area..... 160 m^2 (10 m N–S × 20 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Planted in Young Winter Wheat; 50 Percent Visibility

Site Description
Site 11AX563 is a low-density scatter of prehistoric artifacts (Table 18). The site produced only one diagnostic artifact, a clay tempered sherd. The latter was eroded only allowing for an undifferentiated Woodland temporal assignment. Other artifacts included two chipped stone tools, an adze and biface. An exhausted core and flake fragment round out the recovery here. The site is interpreted as a low intensity habitation locus. Despite producing a diagnostic artifact, the site appears to hold little in the way of future research potential beyond the location and component data presently at hand.

Table 18. Artifact Assemblage Recovered from 11AX563.

Artifact Category	Comments	n=
adze		1
sherd		1
exhausted core		1
flake fragment		1
secondary biface		1
	Total:	**5**

11AX564 (FIELD NO. 6)
Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric
Approximate Area..... 40 m^2 (5 m N–S × 10 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Planted in Young Winter Wheat; 50 Percent Visibility

Site Description
Site 11AX564 is a very low-density scatter of prehistoric lithics (Table 19). Having only produced two pieces of debitage, offering a functional assignment for the site would be precarious at best. The materials recovered here also do not allow for a refined temporal assignment. Give the nature of this site, it appears to hold little in the way of future research potential.

Table 19. Artifact Assemblage Recovered from 11AX564.

Artifact Category	Comments	n=
flake fragment		2
	Total:	**2**

11AX565 (FIELD NO. 7)
Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric
Approximate Area..... 180 m^2 (15 m N–S × 15 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Oakville-Lamont-Alvin
Survey Conditions..... Cultivated Field, Planted in Young Winter Wheat; 50 Percent Visibility

Site Description
Site 11AX565 is a very low-density scatter of prehistoric lithics (Table 20). A formal and informal chipped stone tool were recovered along with a single piece of debitage. The

diminutive nature of the recovered assemblage does not allow for either a refined temporal or functional assignment. Given the nature of the site, it appears to hold little in the way of future research potential.

Table 20. Artifact Assemblage Recovered from 11AX565.

Artifact Category	Comments	n=
tertiary flake		1
unifacial scraper		1
utilized flake		1
	Total:	**3**

11AX566 (FIELD NO. 9)

Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric
Approximate Area..... 80 m^2 (10 m N–S × 10 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions. No-Till, Young Winter Wheat Planted over Corn Stalks; 50 Percent Visibility

Site Description

Site 11AX566 is a very low-density scatter of prehistoric lithics (Table 21). Having only produced two pieces of debitage, offering a functional assignment for the site would be precarious at best. The materials recovered here also do not allow for a refined temporal assignment. Given the nature of the site, it appears to hold little in the way of future research potential.

Table 21. Artifact Assemblage Recovered from 11AX566.

Artifact Category	Comments	n=
flake fragment		1
secondary flake		1
	Total:	**3**

11AX567 (FIELD NO. 10)

Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric
Approximate Area..... 80 m^2 (10 m N–S × 10 m E–W)
Topographic Setting..... North Face of Low Ridge
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX567 is a low-density prehistoric lithic scatter (Table 22). Although exceedingly small, the recovered assemblage suggests a low intensity lithic reduction focus at the site. The assemblage was non-diagnostic however, thus preventing a refined temporal assignment. The site appears to hold little in the way of future research potential.

Table 22. Artifact Assemblage Recovered from 11AX567.

Artifact Category	Comments	n=
flake fragment		1
primary biface		1
tertiary flake		1
	Total:	**3**

11AX568 (FIELD NO. 11)

Site Type(s).....Isolated Find
Component(s).....Undifferentiated Prehistoric
Approximate Area.....1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting.....Low Natural Levee
Elevation.....320-ft. NGVD
Soil Association.....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX568 is a prehistoric isolate consisting of a piece of fire-cracked rock (Table 23). The specimen appears to have once been a large flake, subsequently rendered heavily spalled on both ventral and dorsal surfaces by heat. It was designated as FCR because the thermal damage to the specimen was sufficient enough to prevent assured flake classification. No other prehistoric components were identified in the vicinity of 11AX568. Given the nature of this find, it appears to have no future research potential.

Table 23. Artifact Assemblage Recovered from 11AX568.

Artifact Category	Comments	n=
fire-cracked rock		1
	Total:	**1**

11AX569 (FIELD NO. 12)

Site Type(s).....Isolated Find
Component(s).....Undifferentiated Prehistoric
Approximate Area.....1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting.....Broad, Generally Level Section of Mississippi River Floodplain
Elevation.....320-ft. NGVD
Soil Association.....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX569 is a prehistoric isolate consisting of a single tested cobble (Table 24). The specimen was apparently struck several times in an attempt to inspect interior material quality and subsequently rejected. A slightly larger (n=2) lithic scatter (11AX572) was identified approximately 40-50 m south-southeast of this find. It is possible the two loci have been widely scattered by plowing or by scouring during the 1993 flood. Regardless, the nature of this find precludes it from providing much in the way of future research potential.

Table 24. Artifact Assemblage Recovered from 11AX569.

Artifact Category	Comments	n=
tested cobble		1
	Total:	**1**

11AX570 (FIELD NO. 13)

Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....60 m^2 (5 m N–S × 15 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX570 is a very low-density scatter of prehistoric lithics (Table 25). Having only produced one piece of debitage and a secondary biface, offering a functional assignment for the site would be precarious at best. The materials recovered here also do not allow for a refined temporal assignment. The materials recovered here also do not allow for a refined temporal assignment. Given the nature of this site, it appears to hold little in the way of future research potential.

Table 25. Artifact Assemblage Recovered from 11AX570.

Artifact Category	Comments	n=
flake fragment		1
secondary biface		1
	Total:	**2**

11AX571 (FIELD NO. 14)

Site Type(s).....Isolated Find
Component(s).....Undifferentiated Prehistoric
Approximate Area.....1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX571 is a prehistoric isolate consisting of a single blade flake (Table 26). It was recovered a short distance west of Schendler Cemetery Road. Construction of the road may have largely destroyed a low-density lithic scatter associated with this find. However, no other cultural materials were observed in the immediate vicinity of 11AX571 to substantiate the latter hypothesis. Due to the nature of the recovered specimen, a refined temporal assignment is not possible and it does not appear to hold any future research potential.

Table 26. Artifact Assemblage Recovered from 11AX571.

Artifact Category	Comments	n=
blade flake		1
	Total:	**1**

11AX572 (FIELD NO. 15)

Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....20 m^2 (5 m N–S × 5 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain

Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX572 (formerly 11AX410) is a very low-density scatter of prehistoric lithics (Table 27). Having only produced two pieces of debitage, offering a functional assignment for the site would be precarious at best. The materials recovered here also do not allow for a refined temporal assignment. Given the nature of this site, it appears to hold little in the way of future research potential.

Table 27. Artifact Assemblage Recovered from 11AX572.

Artifact Category	Comments	n=
flake fragment		1
tertiary flake		1
	Total:	**2**

11AX573 (FIELD NO. 16)
Site Type(s) ..... Isolated Find
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX573 is a prehistoric isolate consisting of a single utilized flake (Table 28). The specimen appears to be as an expedient spokeshave. No other sites or isolated finds were identified in the vicinity of 11AX573. Given the nature of the find, it appears to hold no future research potential.

Table 28. Artifact Assemblage Recovered from 11AX573.

Artifact Category	Comments	n=
utilized flake		1
	Total:	**1**

11AX574 (FIELD NO. 17)
Site Type(s) ..... Isolated Find
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX574 is a low-density artifact scatter (Table 29). The recovered artifact assemblage is widely scattered in a narrow band over approximately 120 m of low, natural levee. The natural levee follows along a former tributary of Grand Lake that is now channelized. Artifacts recovered included four formal tools, debitage, and a tested cobble or broken hammerstone. The

site is interpreted as a low-density prehistoric habitation locus, possibly with a lithic reduction occupational focus. Unfortunately, the recovered artifact was a non-diagnostic; thus not allowing for a refined temporal assignment. The site does not hold future research potential.

Table 29. Artifact Assemblage Recovered from 11AX574.

Artifact Category	Comments	n=
primary biface fragment		2
tertiary flake		2
tested cobble	possible fragmented hammerstone	1
untyped scraper		2
	Total:	**7**

11AX575 (Field No. 20)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Late Archaic
Approximate Area ..... 60 m^2 (5 m N–S × 15 m E–W)
Topographic Setting ..... Edge of Broad Depression to North
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX575 is a low-density lithic scatter (Table 30). The scatter was identified above a distinct, broad depression to the north. This depression may represent an old distributary channel or crevasse splay associated with the Mississippi River channel when it occupied Grand Lake. Two pieces of debitage and a Matanzas Cluster (after Justice 1987:119-124) projectile point were recovered here. The latter specimen resembles the Brewerton Eared-Notched type that is common in the Ohio Valley east of Dogtooth Bend. It represents the basis for the temporal assignment above. The recovery of a projectile here suggests the site may have been used as a transitory hunting camp location. Despite producing a diagnostic artifact, Site 11AX575 appears to hold little in the way of future research potential beyond the temporal data presently at hand.

Table 30. Artifact Assemblage Recovered from 11AX575.

Artifact Category	Comments	n=
flake fragment		1
PP/K	Matanzas Cluster (Brewerton Eared-Notched)	1
shatter		1
	Total:	**3**

11AX576 (Field No. 21)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 710 m^2 (30 m N–S × 30 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX576 is a low-density lithic scatter. The recovered artifact assemblage consists entirely of debitage (Table 31). Of note, the debitage specimens recovered included classes representative of almost all stages in the core reduction trajectory suggesting a possible lithic reduction occupational focus here. The assemblage is non-diagnostic and thus a refined temporal assignment is not possible. This site appears to hold little in the way of future research potential.

Table 31. Artifact Assemblage Recovered from 11AX576.

Artifact Category	Comments	n=
flake fragment		5
primary flake		1
secondary flake		1
tertiary flake		1
utilized flake		2
	Total:	**10**

11AX577 (FIELD NO. 22)

Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric
Approximate Area..... 940 m^2 (60 m N–S × 20 m E–W)
Topographic Setting..... Western Margin of a Ridge Terminus
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX577 is a low-density lithic scatter located a short distance north of Pecord Road. Artifacts recovered at the site primarily consisted of debitage although two, fragmented, crude scrapers were also recovered (Table 32). The assemblage is suggestive of only a low intensity, likely transitory utilization of this site location by prehistoric peoples. It appears to hold little in the way of future research potential.

Table 32. Artifact Assemblage Recovered from 11AX577.

Artifact Category	Comments	n=
flake fragment		2
tertiary flake		4
untyped scraper		2
	Total:	**10**

11AX578 (FIELD NO. 23)

Site Type(s)..... Lithic Scatter
Component(s)..... Terminal Middle-Early Late Woodland
Approximate Area..... 80 m^2 (10 m N–S × 10 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX578 is a low-density lithic scatter. The site produced a Steuben Expanding Stemmed-like PP/K, primary biface, and piece of debitage (Table 33). The PP/K is a Terminal Middle-

Early Late Woodland diagnostic (Justice 1987:208). It represents the basis for the temporal assignment above. The recovery of a projectile here suggests the site may have been used as a transitory hunting camp location. Despite producing a diagnostic artifact, Site 11AX578 appears to hold little in the way of future research potential beyond the temporal data presently at hand.

Table 33. Artifact Assemblage Recovered from 11AX578.

Artifact Category	Comments	n=
PP/K	Steuben-like	1
primary biface		1
tertiary flake		1
	Total:	**3**

11AX579 (Field No. 24)

Site Type(s).....Lithic Scatter
Component(s).....Late Archaic
Approximate Area.....790 m^2 (20 m N–S × 50 m E–W)
Topographic Setting.....Eastern Margin of a Ridge Projection
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX579 is a low-density lithic scatter located along the north side of Pecord Road. The landform containing the site is oriented along a north-south axis. It is likely the site continues to the south; across the road and outside of the present study area. The site appears to have had a lithic reduction occupational focus with all stages of the bifacial reduction trajectory being represented in the assemblage (Table 34). A Late Archaic Stemmed Cluster (after Justice 1987) projectile point recovered here is the basis for the temporal assignment. Despite producing a diagnostic artifact, Site 11AX579 appears to have limited research potential as presently defined. It is possible that portions of the site may be located to the south would warrant a change in this assertion.

Table 34. Artifact Assemblage Recovered from 11AX579.

Artifact Category	Comments	n=
bifacial thinning flake		1
core fragment		1
fire-cracked rock		1
flake fragment		1
PP/K fragment	Late Archaic Stemmed Cluster (possibly a Karnak Stemmed)	1
primary biface		2
primary biface fragment		3
secondary biface		2
secondary biface fragment		1
untyped scraper		2
	Total:	**15**

11AX580 (Field No. 40)

Site Type(s).....Isolated Find
Component(s).....Undifferentiated Prehistoric
Approximate Area.....1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Oakville-Lamont-Alvin
Survey Conditions.....Cultivated Field, Plowed over Corn Stalks; 50 Percent Visibility

Site Description

Site 11AX580 consists of a prehistoric isolate. The only artifact recovered at this location was a fragmented scraper (Table 35). Its presence is evidence of only a limited, likely transitory utilization of this location by prehistoric peoples. Due to the nature of this find, it appears to hold little in the way of future research potential.

Table 35. Artifact Assemblage Recovered from 11AX580.

Artifact Category	Comments	n=
unifacial scraper	fragmentary	1
	Total:	**1**

11AX581 (Field No. 41)

Site Type(s).....Historic Homesite and Prehistoric Lithic Scatter
Component(s).. Late-nineteenth–Mid-twentieth Century Historic and Undifferentiated Prehistoric
Approximate Area.....1,960 m^2 (50 m N–S × 50 m E–W)
Topographic Setting.....Margin of Remodeled Terrace Feature to North
Elevation ..... 325-ft. NGVD
Soil Association .....Oakville-Lamont-Alvin
Survey Conditions.....Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX581 consists of the remnants of a rural domicile. A small number of prehistoric lithic artifacts were also recovered from the site. Overall, the scatter can be characterized as low to moderate density. The recovered historic assemblage suggests an initial occupation date between 1880 and 1918 based on the presence of amethyst glass (Table 36). Occupation into the mid-twentieth century is suggested by the recovery of a medicine bottle that once contained "campho-phenique" which was manufactured by the St. Louis Company indicated on the bottle until ca. 1960. The prehistoric assemblage is indicative of only a low intensity, likely transitory utilization of this location by prehistoric peoples. Neither the historic or prehistoric components appear to hold much in the way of future research potential.

Table 36. Artifact Assemblage Recovered from 11AX581.

Artifact Category	Comments	n=
ceramic drainage tile fragment		1
electrical insulator	ceramic	1
container glass	amethyst, clear, light green, and aqua	6
flake fragment		2
medicine bottle	clear with screw top, embossed with "Phenique Chemical Co. St. Louis"	1
metal bolt		1
milk glass		6

Table 36, continued

Artifact Category	Comments	n=
whiteware		6
porcelain	one specimen with a yellow glaze	3
stoneware	unidentified slip	5
	Total:	**32**

11AX582 (FIELD NO. 42)

Site Type(s).....Historic Homesite and Prehistoric Lithic Scatter
Component(s).....Late-nineteenth–Early-twentieth Century Historic and Early Woodland
Approximate Area.....310 m^2 (20 m N–S × 20 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Oakville-Lamont-Alvin
Survey Conditions.....Cultivated Field, Recently Tilled; 75 Percent Visibility

Site Description

Site 11AX582 is a low to moderate-density historic and prehistoric scatter. Although recently tilled, visibility was somewhat limited by the presence of large peds. The historic scatter is representative of a domestic occupation based on the presence of several types of ceramics, glass, and personal items. A late-nineteenth to early-twentieth century occupational range is suggested by both amethyst glass and a bottle with an 1875 patent date. The prehistoric scatter represents a short-term habitation, possibly a hunting camp. An Early Woodland Adena-like PP/K was recovered along with several pieces of debitage and an untyped scraper (Table 37). Neither the historic or prehistoric components appear to hold much in the way of future research potential.

Table 37. Artifact Assemblage Recovered from 11AX582.

Artifact Category	Comments	n=
container glass	amethyst and light aqua	6
container glass	light aqua, base fragment embossed with "Pat'd Jan. 5, 75"	1
flake fragment		5
playing marble fragment	glass; blue, red, and green swirl	1
whiteware		1
PP/K fragment	untyped extended rounded stemmed (Adena-like)	1
stoneware	unidentified slip	4
untyped scraper		1
	Total:	**20**

11AX583 (FIELD NO. 52)

Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....790 m^2 (50 m N–S × 20 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX583 consists of a low-density lithic scatter. The site produced only ten artifacts which were scattered amongst a considerable area (Table 38). An abundance of tertiary flake debitage, much of which was fragmented, was recovered at this location suggesting the site possibly served as a tool refitting locus. It is likely that the occupation of this site was brief. The site appears to hold little in the way of future research potential.

Table 38. Artifact Assemblage Recovered from 11AX583.

Artifact Category	Comments	n=
flake fragments		7
tertiary flake		3
	Total:	**10**

11AX584 (FIELD NO. 53)
Site Type(s).....Isolated Find
Component(s).....Undifferentiated Prehistoric
Approximate Area.....1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX584 consists of a prehistoric isolate. Despite a thorough search of the find area, the site produced only a single cobble core (Table 39). Its presence is indicative of only a brief, single-episode utilization of the site by prehistoric peoples. Due to its isolated nature, the site is unlikely to possess much in the way of future research potential.

Table 39. Artifact Assemblage Recovered from 11AX584.

Artifact Category	Comments	n=
cobble core		1
	Total:	**1**

11AX585 (FIELD NO. 54)
Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....20 m^2 (5 m N–S × 5 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX585 is a low-density lithic scatter. It produced only three artifacts from a small area. The site is interpreted as a prehistoric habitation locus, likely with a lithic reduction occupational focus based on the presence of a core and a couple of pieces of debitage (Table 40). The site is evidence of a low intensity, likely transitory utilization of this location by prehistoric peoples. Due to the nature of this scatter it likely holds little in the way of future research potential.

Table 40. Artifact Assemblage Recovered from 11AX585.

Artifact Category	Comments	n=
cobble core		1
secondary flake		2
	Total:	**3**

11AX586 (Field No. 55)

Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric
Approximate Area..... 790 m^2 (50 m N–S × 20 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX586 consists of a low-density lithic scatter. The site is interpreted as a prehistoric habitation locus possibly with a lithic reduction occupational focus. The latter is asserted based on the presence of an exhausted core, debitage, and a hammerstone. The site also produced a couple of scrapers (Table 41). Occupation of the site appears to have been of low intensity and likely transitory in nature. Given the nature of the site it holds little in the way of future research potential.

Table 41. Artifact Assemblage Recovered from 11AX586.

Artifact Category	Comments	n=
exhausted core		1
flake fragment		1
hammerstone		1
tertiary flake		2
unifacial scraper		1
untyped scraper		1
utilized flake		2
	Total:	**20**

11AX587 (Field No. 56)

Site Type(s)..... Untyped Historic Scatter and Prehistoric Lithic Scatter
Component(s)..... Early–Mid-Twentieth Century Historic and Undifferentiated Prehistoric
Approximate Area..... 310 m^2 (20 m N–S × 20 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX587 is a very low-density prehistoric and historic scatter. It produced only two prehistoric lithic artifacts and two twentieth-century historic items (Table 42). Due to the paucity of the recovered assemblage, a functional interpretation of either the prehistoric or historic occupation is not offered. Only a limited utilization of this location is indicated for the prehistoric period. The site is found along a field edge so it is possible the historic items were dumped here. Regardless, the nature of the scatter precludes it from offering much in the way of future research potential.

Table 42. Artifact Assemblage Recovered from 11AX587.

Artifact Category	Comments	n=
electrical insulator	ceramic	1
flake fragment		1
ironstone		1
untyped scraper		1
	Total:	**4**

11AX588 (Field No. 57)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 180 m^2 (15 m N–S × 15 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX588 is a very low-density lithic scatter. A total of four artifacts, all widely scattered, were recovered at this location. Diversity in artifact types is indicated in the assemblage, which contains a fragmented biface and several pieces of flake debitage including a core trimming and blade flake (Table 43). The site is interpreted as a short-term, likely transitory prehistoric habitation locus. It appears to hold little in the way of future research potential.

Table 43. Artifact Assemblage Recovered from 11AX588.

Artifact Category	Comments	n=
blade flake	ceramic	1
core trimming flake		1
flake fragment		1
secondary biface fragment		1
	Total:	**4**

11AX589 (Field No. 58)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 2,360 m^2 (100 m N–S × 30 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX589 consists of a low-density lithic scatter. The artifacts recovered were widely distributed over an expansive area. No diagnostic artifacts were recovered. The assemblage included a core fragment, flake debitage, and several untyped scrapers (Table 44). The site is interpreted as a low-intensity habitation locus. The site holds little in the way of future research potential.

Table 44. Artifact Assemblage Recovered from 11AX589.

Artifact Category	Comments	n=
core fragment	ceramic	1
flake fragment		4
primary flake		1
untyped scraper		1
	Total:	**9**

11AX590 (Field No. 59)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 80 m^2 (10 m N–S × 10 m E–W)
Topographic Setting ..... Low Ridge
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX590 consists of a very low-density lithic scatter. A total of only two artifacts, both chipped stone tools was recovered from the site. One of the artifacts was a chipped celt preform. The specimen had not yet been ground into its final form before being heavily utilized as evidenced by use-wear polish on its bit end. The other specimen recovered consisted of a crude, untyped scraper (Table 45). Due to the paucity and nature of materials present at the site, it holds little in the way of future research potential.

Table 45. Artifact Assemblage Recovered from 11AX590.

Artifact Category	Comments	n=
celt preform	ceramic	1
untyped scraper		1
	Total:	**2**

11AX591 (Field No. 60)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 1,410 m^2 (30 m N–S × 60 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX591 consists of a low-density lithic scatter. Recovered artifacts included a tested cobble, possible adze preform and several pieces of flake debitage (Table 46). The site is interpreted as a low-intensity prehistoric habitation locus. Another site, 11AX595 is located approximately 20-30 m southwest of 11AX591. At this time, it is unclear if the two are related but it is possible that site 11AX591 is part of 11AX595. Alone, site 11AX591 does not appear to hold much in the way of future research potential although if part of site 11AX595 may indeed be significant to the interpretation of the latter. Thus, the relationship (if any) between these sites should be assessed and established prior to the implementation of the proposed floodway project. This could be conducted during the testing program that is recommended for 11AX595 (see discussion below).

Table 46. Artifact Assemblage Recovered from 11AX591.

Artifact Category	Comments	n=
bifacial thinning flake		1
flake fragment		2
primary biface		1
tested cobble		1
utilized flake		2
	Total:	**7**

11AX592 (Field No. 61)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 710 m^2 (30 m N–S × 30 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX592 is a moderate-density lithic scatter. The majority of artifacts collected here were recovered in a concentrated, approximately 80 m^2 area near the center of the site. Flake debitage accounts for the majority of the recovered artifact assemblage although a cobble core was also found (Table 47). The site is interpreted as a prehistoric habitation locus. The small size of the site and the tight concentration of materials found here suggest it was intensively occupied for a short period of time. Overall, however, the site appears to hold little in the way of future research potential.

Table 47. Artifact Assemblage Recovered from 11AX592.

Artifact Category	Comments	n=
bifacial thinning flake		2
blade flake		1
flake fragment		4
cobble core		1
tertiary flake		3
	Total:	**11**

11AX593 (Field No. 62)

Site Type(s) ..... Prehistoric Lithic Scatter and Untyped Historic Scatter
Component(s) .... Undifferentiated Prehistoric and Late-Nineteenth–Mid-Twentieth Cent. Historic
Approximate Area ..... 710 m^2 (30 m N–S × 30 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX593 consists of a low-density prehistoric and historic scatter. The prehistoric scatter consists wholly of lithics. Flake debitage dominates the prehistoric assemblage although a core fragment was also recovered. The historic assemblage appears to be domestic in nature, containing a number of kitchen ceramics and container glass. A single decorated piece of

whiteware suggests the initial historic occupation here occurred in the late-nineteenth century. However, the remainder of the historic assemblage was entirely twentieth century in origin (Table 48). Therefore, the site more likely dates only to the early to mid part of the last century. Regardless, neither the prehistoric or historic components appear to offer much in the way of future research potential.

Table 48. Artifact Assemblage Recovered from 11AX593.

Artifact Category	Comments	n=
coal		1
container glass	amber, aqua, clear	4
core fragment		1
decorated whiteware	blue transfer print	1
flake fragment		4
flat glass		1
whiteware		1
stoneware	unidentified slip	3
tertiary flake		2
	Total:	**18**

11AX594 (Field No. 63)

Site Type(s)..... Prehistoric Lithic Scatter and Historic Isolate
Component(s)..... Late Archaic and Untyped Historic
Approximate Area.....5,890 m^2 (50 m N–S × 150 m E–W)
Topographic Setting.....Low Natural Levee
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX594 is a moderate-density prehistoric lithic scatter dating to the Late Archaic period. An isolated historic artifact was also recovered here. The prehistoric component is most dense at the west end of the site and becomes more and more sparse moving to the east. In the western portion of the site and artifact concentration was observed in an approximately 80 m^2 area. This concentration produced primarily bifaces and biface fragments. A number of cores, all exhausted were recovered elsewhere on the site along with a large amount of flake debitage. Not all of the latter artifact class observed was collected. The temporal assignment for the site is based on the recovery of a Late Archaic Stemmed Cluster and Motley-like PP/K. Site 11AX594 is interpreted as a lithic tool manufacturing locus. All stages in the biface reduction trajectory from core to finished tool are represented by multiple specimens at the site. The site possesses a number of characteristics conducive to future research potential including intact spatial patterning, moderate artifact density, and a specialized occupational focus (Table 49). In short, this site is one of the better candidates for future research identified during the project.

Table 49. Artifact Assemblage Recovered from 11AX594.

Artifact Category	Comments	n=
bifacial thinning flake		2
exhausted core		3
fire-cracked rock		4
flake fragment		16
PP/K fragment	Late Archaic Stemmed Cluster (McWhinney-like)	1

Table 49, continued

Artifact Category	Comments	n=
PP/K fragment	Motley-like	1
primary biface		1
primary biface fragment		2
secondary biface		2
secondary biface fragment		5
secondary flake		1
tertiary biface fragment	one specimen is a probable PP/K distal	5
tertiary flake		4
unifacial scarper	one specimen is fragmented	4
whiteware	with unidentified maker's mark	1
	Total:	**52**

11AX595 (Field No. 64)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 180 m^2 (15 m N–S × 15 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX595 is a moderate to high-density lithic scatter. Recall, its relationship to nearby 11AX591 (located approximately 20-30 m to the northeast) is presently unclear but given their very close proximity it is possible the two are separate activity loci within the same site. Site 11AX595 produced a relatively large number of flake debitage specimens from a small area (Table 50). The site also produced a couple of hammerstones and scrapers. The site is interpreted as a prehistoric habitation, possibly with a lithic reduction occupational focus. Given the high artifact density observed here in a very small area, the site likely retains a degree of future research potential. This potential should be further evaluated via testing or other means prior to implementation of the floodway project. Note that this testing program should include provisions to determine the relationship (if any) between 11AX595 and nearby 11AX591.

Table 50. Artifact Assemblage Recovered from 11AX595.

Artifact Category	Comments	n=
flake fragment		7
hammerstone		2
primary flake		1
unifacial scraper		1
tertiary flake		5
untyped scraper		1
	Total:	**17**

11AX596 (Field No. 65)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric (Possibly Archaic)
Approximate Area ..... 180 m^2 (15 m N–S × 15 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD

Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX596 is a low-density lithic scatter. The site produced several pieces of utilized debitage, an untyped scraper and a groundstone specimen thought to possibly represent an unfinished bannerstone (Table 51). The latter specimen closely resembles the humped bannerstone variety, lacking only the axial-drilled hole for hafting. It is also possible the specimen represents a binding type bannerstone. Bannerstones are most commonly associated with Late Archaic cultures and thus a tentative temporal assignment to that period is offered for the site. Despite producing this relatively rare artifact type, the site otherwise appears to hold little in the way of future research potential.

Table 51. Artifact Assemblage Recovered from 11AX596.

Artifact Category	Comments	n=
groundstone	possible incomplete humped bannerstone	1
untyped scraper		1
utilized flake		3
	Total:	**5**

11AX597 (FIELD NO. 66)
Site Type(s).....Prehistoric Lithic Scatter and Historic Homesite
Component(s)..... Undifferentiated Prehistoric and Early-Mid Twentieth Century Historic
Approximate Area.....2,200 m^2 (70 m N–S × 40 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association .....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX597 is a moderate-density prehistoric and historic scatter. The prehistoric component dominates the overall artifact assemblage and is comprised primarily of chipped stone tools. The latter include several primary and secondary bifaces (and fragments thereof), as well as several scrapers. A cobble core and a celt fragment were also recovered here (Table 52). Debitage was also relatively abundant and not all observed was collected. The prehistoric component is interpreted to represent a habitation locus with a possible focus on initial stage lithic reduction. The historic component appears to be domestic in nature as evidenced by abundant kitchen ceramics and container glass. All historic artifacts recovered date to the early and mid twentieth century.

The morphological variability reflected in the prehistoric assemblage is unusually high compared with most other sites recorded/investigated during the study. This suggests the site may yet possess a degree of future research potential with regards to the latter component. Therefore, this potential should be further evaluated via testing prior to implementation of the proposed floodway project.

Table 52. Artifact Assemblage Recovered from 11AX597.

Artifact Category	Comments	n=
bifacial thinning flake		1
canning seal liner	milk glass	1
celt fragment		1
cobble core		1

Table 52, continued

Artifact Category	Comments	n=
container glass	amber, aqua, and clear	4
bottle neck	light aqua, double ring finish	1
flake fragment		5
flat glass		1
ironstone		1
milk glass		1
porcelain		1
primary biface		2
primary biface fragment		1
secondary biface	probable adze preform	1
secondary biface fragment		2
stoneware	unidentified slip	3
tertiary flake		2
unifacial scraper		1
untyped scraper		2
whiteware		2
	Total:	**34**

11AX598 (Field No. 67)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric
Approximate Area ..... 710 m^2 (30 m N–S × 30 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX598 is a low-density lithic scatter. The site produced two cores, several pieces of flake debitage and a suite of scrapers (Table 53). The site is interpreted as a prehistoric habitation locus. The occupation here appears to be low in intensity and was likely transitory in nature. The presence of the cores suggests a lithic reduction activity focus at this location. Given the number of scrapers recovered suggests a secondary, game processing, focus as well. Considered as a whole, the site appears to hold little in the way of future research potential.

Table 53. Artifact Assemblage Recovered from 11AX598.

Artifact Category	Comments	n=
exhausted core		1
flake fragment		3
secondary flake		1
shaped core		1
shatter		1
unifacial scraper	one specimen is fragmentary	2
untyped scraper		1
	Total:	**10**

11AX599 (FIELD NO. 68)

Site Type(s)..... Lithic Scatter
Component(s)..... Terminal Archaic
Approximate Area..... 80 m^2 (10 m N–S × 10 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX599 is a small, low-density lithic scatter. The site produced a single diagnostic artifact, a Terminal Archaic Barbed Cluster (after Justice 1987) projectile point. The specimen most closely resembles the Buck Creek Barbed type. Additionally, the site produced an exhausted core and several pieces of flake debitage (Table 54). The site is interpreted as a prehistoric habitation locus. The occupation of the site was low in intensity and likely transitory. It was likely utilized as a hunting camp. Despite producing a diagnostic artifact, the site appears to hold little in the way of future research potential beyond the temporal and locational data.

Table 54. Artifact Assemblage Recovered from 11AX599.

Artifact Category	Comments	n=
exhausted core		1
flake fragment		2
secondary flake		1
PP/K	Terminal Archaic Barbed Cluster	1
	Total:	**5**

11AX600 (FIELD NO. 69)

Site Type(s)..... Lithic Scatter
Component(s)..... Terminal Archaic
Approximate Area..... 470 m^2 (20 m N–S × 30 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation..... 320-ft. NGVD
Soil Association..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX600 is a low-density lithic scatter. It is located in the southwest corner of the field containing it. Artifact recovery primarily consisted of flake debitage. A possible adze preform and two scrapers were also recovered (Table 55). The site is interpreted as a prehistoric habitation locus. The occupation of the site appears to have been low in intensity and was likely transitory in nature. The site appears to hold little in the way of future research potential.

Table 55. Artifact Assemblage Recovered from 11AX600.

Artifact Category	Comments	n=
bifacial thinning flake		1
flake fragment		4
core trimming flake		1
secondary biface	possible adze preform	1
tertiary flake		2
unifacial scraper	fragmentary	2
	Total:	**11**

11AX601 (Field No. 70)

Site Type(s).....Lithic Scatter
Component(s).....Undifferentiated Prehistoric
Approximate Area.....120 m^2 (15 m N–S × 10 m E–W)
Topographic Setting.....Margin of Remodeled Terrace Feature
Elevation.....320-ft. NGVD
Soil Association.....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description

Site 11AX601 is a very low-density lithic scatter. The recovered assemblage includes two pieces of flake debitage and two scrapers (Table 56). None of the recovered artifacts were temporally sensitive. The site is interpreted as a prehistoric habitation. The very low artifact density associated with the site suggests it was occupied only briefly during the prehistoric stage. Due to the nature of this site, it appears to hold little in the way of future research potential.

Table 56. Artifact Assemblage Recovered from 11AX601.

Artifact Category	Comments	n=
tertiary flake		2
unifacial scraper	one fragmentary, one possibly a crude spokeshave	2
	Total:	**4**

11AX602 (Field No. 71)

Site Type(s).....Prehistoric Lithic Scatter and Untyped Historic Scatter
Component(s).....Terminal Archaic, Early Woodland, Late Woodland-Mississippian and Late-nineteenth–Early-twentieth Century Historic
Approximate Area.....3,140 m^2 (80 m N–S × 50 m E–W)
Topographic Setting.....Margin of Remodeled Terrace Feature
Elevation.....320-ft. NGVD
Soil Association.....Lawson-Sawmill-Darwin
Survey Conditions.....Cultivated Field, Recently Tilled; 80 Percent Visibility

Site Description

Site 11AX602 is a high-density lithic scatter with a diminutive historic component. The site lies on the bank of Grand Lake, a former Mississippi River channel. Prehistoric diagnostics recovered from the site include Terminal Archaic to Early Woodland dart points and a later, Late Woodland–Mississippian arrow point. In addition to the PP/Ks, the site produced an abundance of flake debitage, representatives of all phases of the biface reduction trajectory, and a celt (Figure 57). The site is interpreted as a prehistoric habitation locus. Give the number of artifacts, both observed and collected, the site obviously saw intensive occupation. Recall, repeated occupation of the site is indicated in the multicomponent assemblage. The occupation of this locale was likely tied to exploitation of resources associated with nearby Grand Lake. The lake was no doubt much larger in prehistoric times than it appears now.

The historic component included several bottle fragments and a few ceramics. Amethyst bottle glass here suggests a ca. 1880-1918 date range for a couple of the glass items. Historic materials here are likely the product of informal dumping. Bank lines appear to be a favored informal dumping location throughout the Southeast.

Given the intensive, multicomponent nature of the prehistoric occupation here, it is judged to hold a high degree of future research potential. In fact, it is one of the best sites identified during

the study in terms of potential to produce additional significant archaeological data relating to the prehistoric occupation of Dogtooth Bend. This site should be further evaluated prior to implementation of the proposed floodway project, and is recommended potentially eligible for NRHP listing.

Table 57. Artifact Assemblage Recovered from 11AX602.

Artifact Category	Comments	n=
bifacial thinning flake	one specimen fragmentary	2
bottle neck	amethyst, crown finish	2
bottle neck	clear, collared ring finish	1
celt fragment		1
core fragment		3
flake fragment		29
groundstone		1
polished flake		1
decorated ironstone	hand painted, monochrome (blue)	1
PP/K fragment	likely Terminal Archaic Barbed Cluster (missing portion of stem)	1
PP/K	Cypress Stemmed-like	2
PP/K	Sequoyah-like (missing distal and barbs)	1
primary biface		2
primary biface fragment		3
primary flake		2
secondary biface		1
secondary biface fragment		1
secondary flake		8
shaped core		1
shatter		3
spokeshave		1
stoneware	unidentified slip	3
tertiary biface fragment		5
tertiary flake		11
untyped biface fragment		1
untyped scraper	fragmentary	3
untyped scraper		18
utilized flake		5
whiteware		1
	Total:	**114**

11AX603 (Field No. 72)

Site Type(s) ..... Lithic Scatter and Historic Isolate
Component(s) ..... Undifferentiated Prehistoric and Late-nineteenth–Early-twentieth Century Historic
Approximate Area ..... 1,260 m^2 (40 m N–S × 40 m E–W)
Topographic Setting ..... Margin of Remodeled Terrace Feature
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 90 Percent Visibility

Site Description
Site 11AX603 is a low to moderate-density lithic scatter and historic isolate. The prehistoric artifact assemblage contains an abundance of flake debitage. Other artifacts recovered include a hammerstone fragment, a late-stage biface, and two scrapers. One of the scrapers is a rather unique artifact (Table 58). It exhibits very steep retouch along the margins of a large core-trimming flake. It resembles a Paleoindian scraper given the fine detail and nature of manufacture but was unfortunately not recovered in association with any clearly diagnostic artifacts to substantiate this. Given the age of the landform where this specimen was recovered essentially precludes it from being of such antiquity anyway. The site is interpreted as a prehistoric habitation locus. It appears to have been occupied somewhat intensively during the prehistoric stage possibly with a tool maintenance/manufacturing occupational focus.

As noted above, a single historic artifact was also recovered from the site. The latter specimen consisted of an amethyst bottleneck (ca. 1880-1918). It appears to have been redeposited here as not other historic materials were observed.

Given the nature of the prehistoric occupation at the site, it is believed to hold a reasonably good potential for future research. This potential should be further evaluated via testing or other means prior to implementation of the proposed floodway project.

Table 58. Artifact Assemblage Recovered from 11AX603.

Artifact Category	Comments	n=
bottle neck	amethyst, bead finish	1
flake fragment		12
hammerstone fragment		1
steep-edge scraper	unique artifact, manufactured on a core trimming flake	2
tertiary flake		3
untyped scraper		1
utilized flake		3
	Total:	**23**

11AX604 (FIELD NO. 78)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Undifferentiated Prehistoric and Late-nineteenth–Early-twentieth Century Historic
Approximate Area ..... 80 m^2 (10 m N–S × 10 m E–W)
Topographic Setting ..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 325-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description
Site 11AX604 is a very low-density lithic scatter. The recovered artifact assemblage was non-diagnostic and consisted of two pieces of two pieces of flake debitage and a crude scraper (Table 59). The site is interpreted as a prehistoric habitation locus. The occupation of this site was obviously low in intensity and likely transitory in nature. Given the paucity of recovered materials, the site appears to hold little in the way of future research potential.

Table 59. Artifact Assemblage Recovered from 11AX604.

Artifact Category	Comments	n=
untyped scraper		1
tertiary flake		1
flake fragment		1
	Total:	**3**

11AX605 (Field No. 79)

Site Type(s)..... Lithic Scatter
Component(s)..... Undifferentiated Prehistoric and
Approximate Area..... 160 m^2 (20 m N–S × 10 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 325-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX605 is a low-density lithic scatter found along the north side of Santa Fe Chute Road. It is possible that the road has impacted a portion of the scatter. The recovered artifact assemblage is dominated by flake debitage (Table 60). A crude scraper represents the only non-debitage item recovered here. The site is interpreted as a prehistoric habitation locus. The occupation here appears to have been low in intensity and was likely transitory in nature. The site appears to hold little in the way of future research potential.

Table 60. Artifact Assemblage Recovered from 11AX605.

Artifact Category	Comments	n=
untyped scraper		1
secondary flake		1
tertiary flake		2
flake fragment		6
	Total:	**10**

11AX606 (Field No. 80)

Site Type(s)..... Isolated Find
Component(s)..... Undifferentiated Prehistoric and
Approximate Area..... 1 m^2 (1 m N–S × 1 m E–W)
Topographic Setting..... Broad, Generally Level Section of Mississippi River Floodplain
Elevation ..... 325-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX606 is a prehistoric isolate located in the corner of a field near the point where Santa Fe Chute Road meets the main-line levee. The artifact consisted of a biface, possibly an adze bit (Table 61). No evidence of utilization was observed however. It is likely that this specimen was associated with a larger scatter now destroyed by levee and/or road construction. It holds little in the way of future research potential.

Table 61. Artifact Assemblage Recovered from 11AX606.

Artifact Category	Comments	n=
secondary biface fragment	possible adze bit	1
	Total:	**1**

11AX607 (FIELD NO. 81)

Site Type(s) ..... Historic Homesite
Component(s) ..... Late-nineteenth–Twentieth Century
Approximate Area ..... 710 m^2 (30 m N–S × 30 m E–W)
Topographic Setting ..... Margin of Remodeled Terrace Feature
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX607 (formerly 11AX80) is the razed remnants of a historic homesite. Recovered artifacts support a domestic function for the site including a number of kitchen ceramics and glass (Table 62). Amethyst glass in the collection indicates a possible initial occupation date between 1880 and 1918. A review of the 1934 and 1939 Thebes USGS 15' quadrangle sheet reveals a domestic structure at this location. The structure remains on the 1955 version of the latter quad. By that time, another structure had also been built immediately to the south. Thus, the site appears to have been occupied well into the twentieth century. The site produced the typical rural domestic artifact types and site structure. Therefore, it is not considered to hold much in the way of future research potential.

Table 62. Artifact Assemblage Recovered from 11AX607.

Artifact Category	Comments	n=
doorknob	ceramic	1
stoneware	unidentified slips	8
decorated whiteware	undifferentiated blue glaze	1
whiteware		1
container glass	amethyst and clear	5
canning seal liner	milk glass	1
flat glass		1
	Total:	**18**

11AX608 (FIELD NO. 82)

Site Type(s) ..... Lithic Scatter
Component(s) ..... Terminal Middle Woodland
Approximate Area ..... 1,260 m^2 (80 m N–S × 20 m E–W)
Topographic Setting ..... Eastern Face of Low Ridge
Elevation ..... 320-ft. NGVD
Soil Association ..... Lawson-Sawmill-Darwin
Survey Conditions ..... Cultivated Field, Recently Tilled; 100 Percent Visibility

Site Description

Site 11AX608 (formerly 11AX79) is a moderate-density lithic scatter located along the west bank of a former lake to the east. The site produced an abundance of artifacts, primarily flake debitage. Representatives from all stages in the reduction trajectory were also recovered including a fragmented PP/K (Table 63). The latter specimen was tentatively typed as a Chesser Notched indicating a Terminal Middle Woodland occupation here. A medial fracture has been

formally retouched on it however. Thus, the specimen may have been re-utilized as a hafted scraper at a later time. This site is believed to hold good potential for future research, primarily due to the large and diverse artifact assemblage produced here. This potential should be further evaluated prior to the implementation of the proposed floodway project.

Table 63. Artifact Assemblage Recovered from 11AX608.

Artifact Category	Comments	n=
bifacial thinning flake		1
flake fragment		30
PP/K fragment	Chesser Notched-like (possibly re-utilized as a hafted scraper)	1
primary biface fragment		3
primary flake		1
secondary flake		2
spokeshave	all specimens very crude	3
tertiary biface fragment		1
tertiary flake		6
untyped scraper		6
	Total:	**18**

8. ANALYSIS RESULTS

BY ERIC S. ALBERTSON

Archaeological survey of selected portions of the proposed Len Small Floodway project and revisits to a number of previously recorded sites resulted in the recovery of 879 individually counted artifacts. All artifacts were analyzed according the methods set forth in Chapter 4. Of the 879 artifacts collected, 640 consisted of prehistoric specimens and the remaining 239 were historic in origin. A detailed inventory of all items recovered is presented on a site by site basis in *Appendix B*. This appendix also contains a number of other detailed data sets generated during the analysis. Note that not too much weight should be placed on the artifact frequencies reported above for two related reasons. First, the overall assemblage represents the findings from 55 different sites, and collections at each of the sites were not systematic. Representative collections at each of the site were undertaken. This collection methodology does not allow for a detailed discussion of relative intrasite or overall artifact frequencies. The remainder of this chapter consists of a set of photographic plates portraying selected artifact specimens. These plates illustrate the range of temporally sensitive materials recovered during the study.



Figure 17. Selected Late and Terminal Archaic PP/Ks: a–untyped micro-auriculate (Matanzas Cluster-Brewerton Eared Notched?) from 11AX575; b–Late Archaic Stemmed Cluster (McWhinney-like) from 11AX594; c–Motley-like from 11AX594; d–Terminal Archaic Barbed Cluster from 11AX602; e–Late Archaic Stemmed Cluster (Karnak Stemmed?); and, e–Terminal Archaic Barbed Cluster (Buck Creek Barbed?) from 11AX589.



Figure 18. Selected Late Archaic-Early Woodland PP/Ks: a–untyped straight to slightly contracting stemmed from FN02; and, b–Dickson Cluster (Little Bear Creek or smallish Adena).

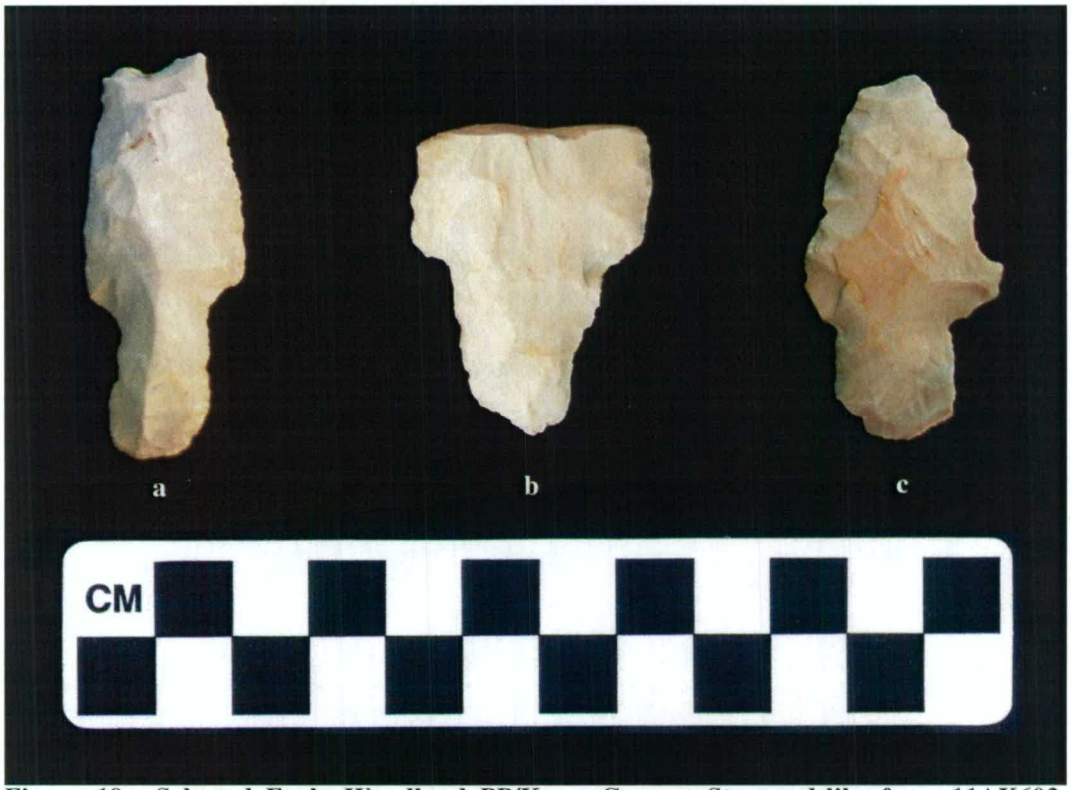


Figure 19. Selected Early Woodland PP/Ks: a–Cypress Stemmed-like from 11AX602; b–untyped, Adena-like from 11AX582; and, c–Cypress Stemmed-like from 11AX602.



Figure 20. Selected Middle-Late Woodland PP/Ks: a–Chesser Notched-like from 11AX608; b–untyped broad expanding stemmed from 11AX341; and, c–Steuben-like from 11AX578.

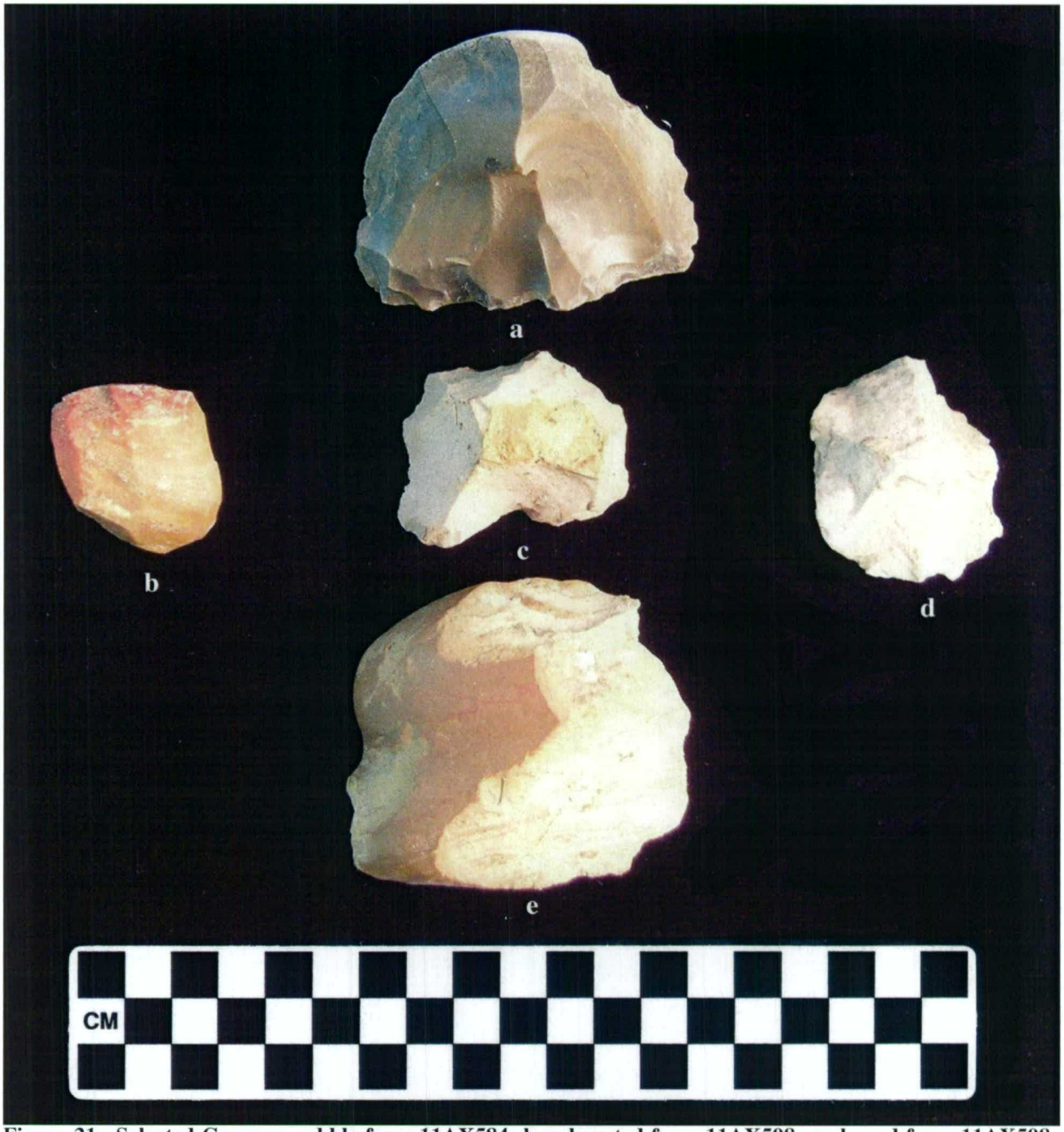


Figure 21. Selected Cores: a–cobble from 11AX584; b–exhausted from 11AX598; c–shaped from 11AX598; d–exhausted from 11AX589; and, e–cobble from 11AX592.



Figure 22. Selected Primary Bifaces: a–11AX563; b–FN02; and, c–11AX567.

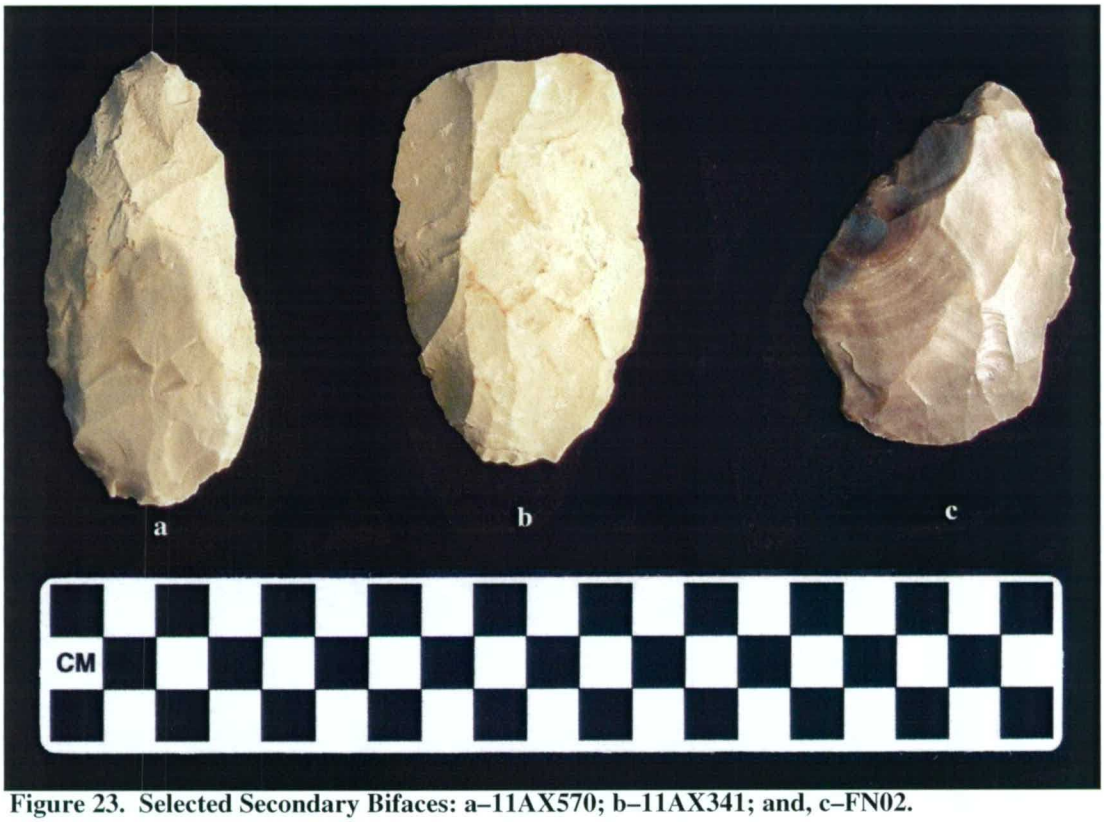


Figure 23. Selected Secondary Bifaces: a–11AX570; b–11AX341; and, c–FN02.



Figure 24. Selected Tertiary Bifaces: a–drill from FN02; b–FN02; c–FN02; d–probable PP/K distal from 11AX608; e–probable PP/K distal from 11AX100.



Figure 25. Selected Polished Bifaces: a–celt preform from 11AX590; and, b–adze from 11AX593.

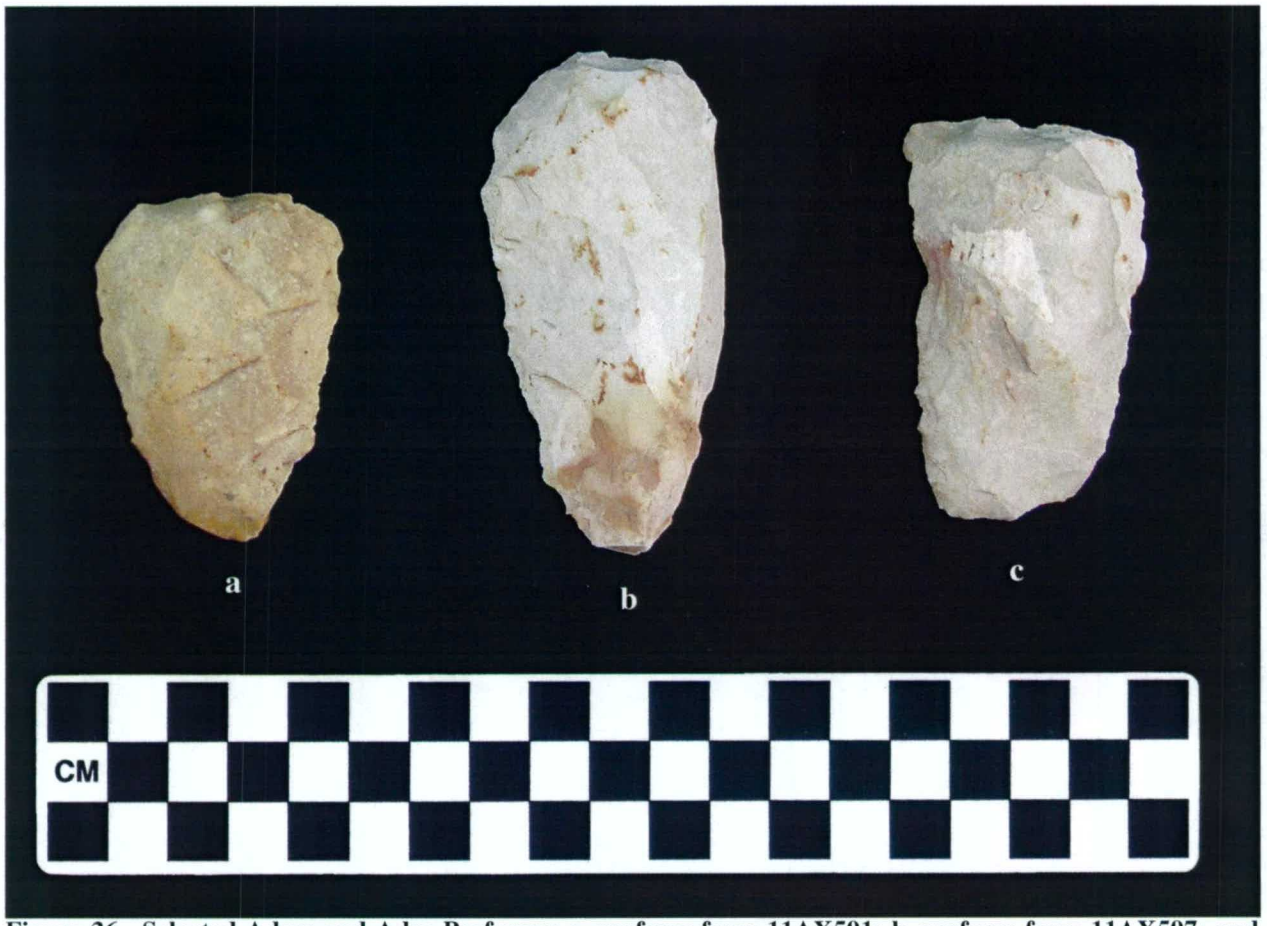


Figure 26. Selected Adzes and Adze Preforms: a–preform from 11AX591; b–preform from 11AX597; and, c–preform or unutilized from 11AX600.



Figure 27. Selected fragmented celt or axe from 11AX597.



Figure 28. Selected Steep-edged Scrapers: a–manufactured on split cobble from FN02; and, b–manufactured on core trimming flake from 11AX603.



Figure 29. Selected blade flake from FN02.



Figure 30. Possible unfinished bannerstone from 11AX596.



Figure 31. Selected Hammerstones: a–11AX341; b–11AX603; c–11AX595; and, d–11AX595.



Figure 32. Selected Whitewares with Maker's Marks: a–11AX594; b–11AX361; c–11AX412; and, d–11AX412.



Figure 33. Selected Stonewares: a–11AX582; b–11AX582; c–11AX412; and, d–11AX412.



Figure 34. Selected Bottlenecks from 11AX412.

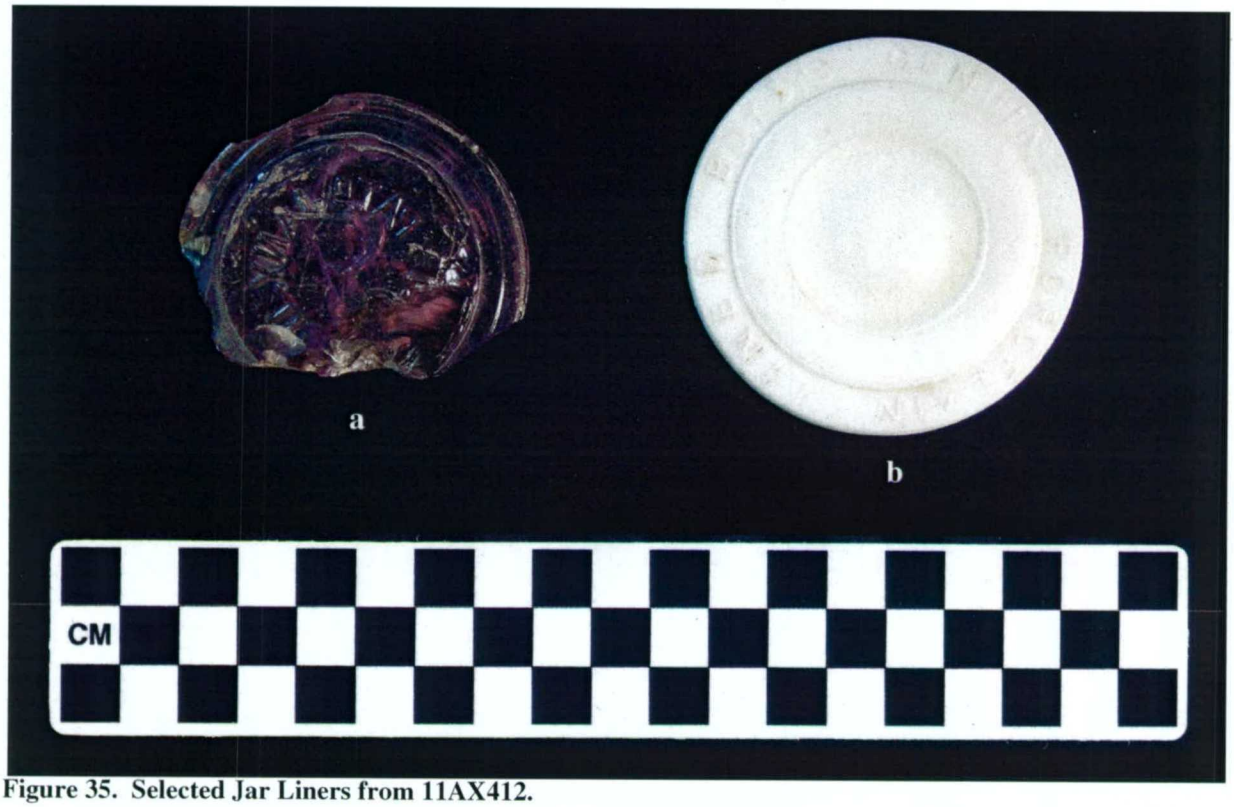


Figure 35. Selected Jar Liners from 11AX412.



Figure 36. Padlock from 11AX412.

9. SUMMARY

BY ERIC S. ALBERTSON

SURVEY COVERAGE

Stephens (1995:124) defined a survey universe in Dogtooth Bend as 1,600 ha (or 3,955-a.) "of relatively high ground in the northern one-third" of the bend. Following Stephens (1995) definition, the present study covered 32.7 percent of the universe. Stephens' (1995) previous study had covered 21.4 percent of her defined universe. Thus, approximately 54 percent of the bend has been formally investigated during the present and latter studies.

SITE DENSITY

As noted in the *Field Results* chapter, a total of 47 newly recorded sites were identified during the present study. The latter figure represents a site density of one site per 11 ha (or one per 27.5-a) over the total of 1,294-a. surveyed. However, 436-a. of the total area surveyed consisted of lands occupied by the Mississippi River well into the nineteenth century. Another 278-acres are now a blue hole lake resulting from deep scouring during the 1993 flood. Finally, approximately 116-a. of the study area consisted of a borrow pit near the community of Cache. Thus, of the 1,294-a. surveyed, only 464-a. held reasonable potential to contain archaeological deposits. Calculating site density for the latter acreage results in one site per approximately 4 ha (or one per 9.8-a.). Stephens (1995:124-127) previously reported a nearly identical site density of one per 9.2-a (note that she reports this figure erroneously as 9.2 sites per *hectare*). Thus, Stephens (1995:127) estimation of 380 sites within the 1,600 ha of Dogtooth Bend defined as her survey universe appears entirely plausible and is well-supported by the present study. Note that this overall estimated site density is likely to be, in reality, somewhat lower following the 1993 flood as evidenced by large tracts of destroyed lands observed and described during the present study.

IDENTIFIED CULTURAL COMPONENTS AND SETTLEMENT PATTERNING

A total of 68 cultural components are represented at the 55 sites investigated during the study. Prehistoric components are represented at all sites investigated except one (11AX607). Prehistoric components identified during the study range from the Late Archaic to Mississippi periods. Historic components are represented at 11 of the sites investigated. The earliest historic component is mid-twentieth century. Most of the historic components have a range terminating in the early to mid-twentieth century. All components identified during the study are discussed in chronological order in the sections below.

LATE ARCHAIC

Pure Late Archaic components were identified at seven of the recorded sites (11AX562, 11AX575, 11AX579, 11AX579, 11AX594, 11AX599, 11AX602, and FN2 [11AX93, 11AX385, 11AX386, 11AX388, 11AX390]). Late Archaic diagnostics identified at these sites include a variety of stemmed projectile point forms (Late Archaic Stemmed Cluster, Merom-like, Matanzas Cluster, Motley, Terminal Archaic Barbed Cluster, and a series of untyped PP/Ks closely resembling other Late Archaic forms). Stephens (1995:160-169) reported a total of 12 sites having Late Archaic components following her 1993 survey. The Late Archaic component assignment at two of Stephens' (1995) sites are based on the recovery of drills. Notwithstanding the possible association with the well-documented Late Archaic lapidary industry, the latter is a precarious temporal assignment as drills appear throughout the archaeological record in the Central Mississippi Valley. Thus, ten sites identified as having Late Archaic components from

the 1993 survey (Stephens 1995) seems more well-founded. Note also that three of Stephens' (1995) sites overlap with the present study's FN2. Stephens' (1995:Table 5-7) also reports three sites with Motley points although assigns this type to the Early Woodland period. They are considered Late Archaic diagnostics herein. Viewed as such the total number of previously recorded sites with Late Archaic components would be even higher (i.e. as many as 13) than discussed immediately above.

Sites with Late Archaic components identified during the present study occurred on two types of landforms, broad areas of floodplains (n=3) and ridges (n=3). Those found along ridges most often occupied marginal portions of the landforms. Stephens' (1995:169) observed a Late Archaic settlement pattern with a concentration of sites along the remnant terrace edge and associated ridge systems along the northern portion of her survey area. Two sites were also identified out in the floodplain. Thus, finding of the present and previous studies appear to be nearly identical in terms of site selection and population density during the Late Archaic period.

LATE ARCHAIC TO EARLY WOODLAND TRANSITION

Only one site (11AX341) investigated during the present study yielded diagnostics bridging the Late Archaic and Early Woodland periods. The latter specimen consisted of an untyped specimen from the Dickson Cluster. Previously, Stephens (1995:Table 5-7) reported four sites having Late Archaic to Early Woodland components based on the recovery of Saratoga Straight Stemmed PP/Ks.

Stephens (1995) does not offer a discussion of Late Archaic-Early Woodland transitional occupation. The site investigated during the present study was located along the western face of a low ridge or natural levee remnant associated with a former lake to the west. The smaller number of these transitional components suggests that the occupations were probably limited either to the Late Archaic or Early Woodland period. Only further investigation at these sites including absolute dating will be able to clarify the nature of such occupations temporally.

EARLY WOODLAND

Two sites (11AX582 and 11AX563), both newly identified, produced pure Early Woodland diagnostics during the present study. These diagnostics consisted of an Adena point and two Cypress Stemmed PP/Ks. Stephens (1995:269) previously reported 14 sites having Early Woodland components. All of Stephens' Early Woodland temporal assignments are based on lithics. Cypress stemmed points were the most common Early Woodland diagnostic recovered by Stephens (1995:Table 5-7) and are represented at half of the Early Woodland sites identified by her. Other diagnostics include Kramer and Adena points. Motley points are reported from three of Stephens' sites. Two of the specimens represent the only diagnostic from the site and represent the basis for the temporal assignment. One of the Motley's was recovered along with a Cypress Stemmed PP/K. We chose to assign Motley points to the traditionally recognized Late Archaic period. Thus, discarding Stephens' two sites producing only Motleys, 12 site previously recorded in the bend have solid Early Woodland components.

In terms of site selection during the Early Woodland, Stephens (1995:169-171) reported they nearly always occurred along ridges noting a similarity to documented Late Archaic settlement pattern. Sites having Early Woodland that were identified by Stephens clustered most often with the ridge systems associated with the remnant terrace along the northern margin of the study area. Likewise, sites identified during the present study with Early Woodland components were found along or relatively near these same ridge systems. By 'relatively near' we refer to 11AX582, which was identified a short distance (approximately 250-m) south of these ridge systems. The primary difference between the present and past survey regarding Early Woodland components is the number of sites identified. This is likely attributable to the fact that the present study covered very little of the remnant terrace edge and associated ridge systems that

appear to be a focal point for Early Woodland occupation. In the few cases, survey acreage did encompass these landforms, Early Woodland components were identified. Thus, the importance of the terrace edge during the Early Woodland as originally asserted by Stephens (1995) has been reinforced by the findings of the present study both in terms of where Early Woodland sites are and are not located.

MIDDLE WOODLAND

Only one site (11AX608) with a pure Middle Woodland component was identified during the present study. The latter was based on the recovery of a Chesser notched PP/K Another possible Middle Woodland component is present at site 11AX563 based on the recovery of a badly eroded, clay tempered sherd. Stephens' (1995:171-173) reported Middle Woodland components at 15 sites during her 1993 Dogtooth Bend survey. Diagnostic lithic recovered by Stephens included Snyders and Steuben points and lamellar blades. Eleven of the Middle Woodland sites reported by Stephens (1995:171) produced ceramics as well. Both plain and fabric impressed specimens were recovered and were characterized as being Baumer-like.

In terms of settlement patterning, Stephens (1995:173) describes Middle Woodland cultures as "dispersed over the northern and western portions" of the survey area. The occupations were again found along the remnant terrace edge (as was 11AX608) and other ridges throughout the bend. Most were also noted by Stephens as being associated with swamps and/or swales. A nodal Middle Woodland settlement was identified at Site 11AX76 near the Bumgard Cemetery by Stephens. She notes that nodal settlements surrounded by smaller, dispersed occupations is typical of Middle Woodland settlement systems in southern Illinois and the Ohio Valley. Likewise, this is a typical system observed elsewhere in the Central Valley.

TERMINAL MIDDLE TO LATE WOODLAND TRANSITION

A single, newly recorded site (11AX578) containing a Terminal Middle to Late Woodland component was identified during the study. The latter site produced a Steuben-like PP/K. Recall, Stephens (1995:Table 5-7) also reported the recovery of a Steuben projectile but chose to assign it as a pure Middle Woodland component. Site 11AX578 was identified along the southern edge of the study area, just northeast of a low ridge system. Because this transitional component was not recognized by Stephens (1995) she offers no further discussion regarding settlement patterning during this temporal span.

LATE WOODLAND TO MISSISSIPPIAN

No pure Late Woodland or Mississippi period diagnostics were identified in the recovered assemblage(s) from the present study. In fact, the only late prehistoric artifact recovered consists of a Sequoyah-like arrow point from 11AX602.

Stephens (1995:173-175) previously reported the identification of 13 sites with Late Woodland components. Most of these component assignments were based on the recovery of Raymond and Barnes ceramics. A number of Baytown ceramics were also recovered. Baytown sherds were assigned as Emergent Mississippian diagnostics by Stephens (1995:173) however. The only diagnostic Late Woodland lithic artifact recovered by Stephens' crews was a Lowe Flared Base PP/K.

Settlement patterning during the Late Woodland indicates a preference for prominent landforms in the northern, western, and southern margins of Stephens' (1995) study area. Occupations are dispersed and are generally of a low intensity (Stephens 1995:175).

Emergent Mississippian and Mississippian components were the most common temporally defined units identified by Stephens (1995). Twenty-three sites contained Emergent

Mississippian components. These component assignments were based on the recovery of Baytown and Dillinger ceramics and Scallorn PP/Ks. Additional materials recovered that date to both the Emergent and full Mississippian noted by Stephens included Madison points and chipped stone hoes and fragments thereof. Thirty-one sites identified by Stephens contained Mississippian components. These components were based on Mississippi Plain, Bell Plain, and Varney Red Filmed ceramics. Additional components were based on the Madison points and hoes noted above as well as a gouge.

Settlement patterning during the Emergent Mississippian and Mississippian are similar according to Stephens (1995:175-181). During the Emergent Mississippian, Stephens (1995) identified several nodal occupations complimented by generally dispersed, smaller occupations throughout the portion of Dogtooth Bend investigated. As would be expected, higher elevations including terrace and ridge locales were selected by Emergent Mississippian peoples. Such locations (and sites) were often previously occupied by earlier prehistoric cultures as well. Settlement of Dogtooth Bend during the Mississippian period is obviously dominated by the Dogtooth Bend Mound center. Dispersed, outlying farmsteads and hamlets associated with the mound center were identified by Stephens. Locations for the latter Mississippian habitations were selected on the basis of well-drained soils on generally level grounds in relatively close proximity to water sources rather than on distance from the mound center based on Stephen's (1995:180-181) data.

Undifferentiated Prehistoric Components

Five revisited and 37 newly identified sites investigated during the present study contained prehistoric artifacts that would not allow for a refined temporal assignment. Assemblages from these sites were typically small and were often comprised of only flake debitage. Stephens (1995:181-182) identified 32 similar scatters. Stephens noted that many of these sites were identified in broad areas of open floodplain although such sites were identified throughout the study area as well. The same situation was observed during the present study. It appears that many of the undifferentiated prehistoric components represent low intensity, often transitory, occupations.

Historic

A total of 11 sites (11AX361, 11AX412, 11AX581, 11AX582, 11AX587, 11AX593, 11AX594, 11AX597, 11AX602, 11AX603, and 11AX607) with historic components were investigated during the present study. Of these, nine were newly recorded sites. The earliest historic component identified dates to the late nineteenth century. Eight of the sites had occupational ranges from the late nineteenth through the early to mid twentieth centuries. Two of the site's occupations were limited to the twentieth century only. The occupational range of the last site could not be determined due to the paucity of recovered historic materials. All of the historic sites investigated during the study had a domestic occupational focus. All of them contained prehistoric components as well.

Stephens (1995:182) reported a total of 28 sites having historic components following her 1993 survey of Dogtooth Bend. The earliest historic component identified by the latter research dates to the mid-nineteenth century and was based on the recovery of pearlwares. The majority of components dated from the late nineteenth century onwards however.

In terms of historic settlement patterning in the bend, Stephens (1995:182) reports a preference for site locations along the gravel roads occupying the bend. The latter is common although it should be pointed out that a relatively large number of historic sites were also reported on the interior portions of lands in the bend, away from (at least existing) roads. A similar situation was observed during the present study also. Dispersal of historic sites across the landscape is typical throughout the Central Valley and Southeast particularly during the sharecropper period.

DISPOSITION OF SITES DESIGNATED FOR REVISIT

Table 64 below summarizes the results of site revisits. The table includes information from Stephens (1995:Table 5-10) revisits to the sites following the 1993 episode. It also provides data on whether or not each of the sites was relocated during the present study. Finally, comments regarding the site's present status are offered. Detailed descriptions of each site relocated are provided in the *Field Results* chapter.

A total of 28 sites were designated for revisit by the SOW. Two additional sites were thought to possibly extend into the proposed floodway area. Of this total, only 12 could be relocated. Some of the relocated sites were assigned new trinomials by the ISM Site Files Manager. Others were left with their original site designation. Note that two sites (15AX427 and 15AX429) thought to possibly extend into the floodway could not be re-evaluated. Thus, their current disposition is unknown. The latter sites lay in a 40-a. tract of land covered in thick winter wheat. As noted in the *Introduction*, this tract was harvested but immediately drilled with beans. With no surface visibility and having been denied permission to shovel test the field, we were unable to verify these site's status.

Table 64. Status of Sites Slated for Revisit.

Site	Stephens 1995 Visit	PCI 2004 Visit	Comments
11AX79	n/a	relocated	assigned new trinomial (11AX608) by ISM
11AX80	n/a	relocated	assigned new trinomial (11AX607) by ISM
11AX81	n/a	not relocated	
11AX341	n/a	relocated	recorded as Field No. 83–update form submitted to ISM
11AX342	n/a	not relocated	
11AX361	entire site covered in shallow sand	relocated	recorded as Field No. 19–update form submitted to ISM
11AX362	entire site covered in shallow sand	not relocated	
11AX363	entire site covered in shallow sand	not relocated	
11AX364	surface erosion over portion of site	not relocated	several IFs recorded in vicinity
11AX368	entire site covered in shallow sand	relocated	recorded as Field No. 8–update form submitted to ISM
11AX369	entire site undisturbed	not relocated	
11AX375	portion of site covered in shallow sand	relocated	recorded as Field No. 3–update form submitted to ISM
11AX376	entire site affected by surface erosion, pitting, and gully	relocated	recorded as Field No. 4–update form submitted to ISM
11AX377	entire site covered in thick sand	not relocated	
11AX379	entire site undisturbed	not relocated	
11AX380	portion of site covered in shallow sand	relocated	assigned new trinomial (11AX582) by ISM
11AX410	entire site covered in shallow sand	relocated	assigned new trinomial (11AX572) by ISM
11AX411	entire site covered in shallow sand	not relocated	several IFs recorded in vicinity
11AX412	entire site covered in shallow sand	relocated	recorded as Field No. 18–update form submitted to ISM
11AX417	entire site subject to frequent inundation	not relocated	

Table 64, continued

Site	Stephens 1995 Visit	PCI 2004 Visit	Comments
11AX418	entire site covered in thick sand	not relocated	probably buried under sand
11AX419	entire site covered in thick sand	not relocated	probably buried under sand
11AX420	portion of site subject to frequent inundation	relocated	assigned new trinomial (11AX563) by ISM
11AX422	entire site subject to frequent inundation	not relocated	
11AX423	entire site covered in shallow sand	not relocated	
11AX425	portion of site covered in thick sand; also subject to frequent inundation	not relocated	
11AX426	entire site covered in thick sand	not relocated	
11AX427	portion of site covered in thick sand	unknown status	potentially located in 40-a. tract not surveyed
11AX429	entire site covered in thick sand	unknown status	potentially located in 40-a. tract not surveyed
11AX437	portion of site covered in thick sand	observed	cemetery in same condition as described by Stephens (1995)

With regards to those sites not relocated, we offer the following. Many of these previously recorded sites were low-density scatters when originally described. It is likely they were completely, or nearly completely, collected by Stephens' (1995) crews. Another portion of the sites appear to have been destroyed by the 1993 floodwaters or are now deeply covered in sands brought in with the flood. A small portion of the sites (those assigned different site numbers by the ISM) may have been moved on the landscape by the floodwaters. In personal communication to the principal investigator for the present study, has observed this process elsewhere in the Central Mississippi Valley following catastrophic flood events. This is not to say the sites were moved great distances. Recording a scatter 10 to 20 m outside of the previously defined boundaries of a site prompted a new trinomial designation by ISM. We must concede that it is also entirely plausible that some of the latter sites have not actually "moved" but were plotted slightly differently on project maps during the present and past studies making the sites appear to be different cultural properties.

MANAGEMENT CONSIDERATIONS

SITE ELIGIBILITY RECOMMENDATIONS

Per the SOW for this study, "[a] formal determination of eligibility is not a requirement of this work order...[h]owever, any resource which can be clearly evaluated as eligible or not eligible for NRHP listing should be evaluated and included in the report recommendations" (SOW, Harris 2003) Due to the level of effort and prescribed for the study nature of the sites encountered during the study, no sites could be "clearly evaluated as eligible" for NRHP listing. However, a suite of sites appeared to have sufficient integrity to warrant a formal determination of eligibility prior to implementation of the proposed floodway project. The latter sites are characterized as "potentially eligible" for NRHP listing. In trinomial order the potentially eligible sites are: 11AX100, 11AX341, 11AX361, 11AX368, 11AX412, 11AX579, 11AX591 [as part of 11AX595] 11AX594, 11AX595, 11AX597, 11AX602, 11AX603, 11AX608 and FN2 [11AX93, 11AX385, 11AX386, 11AX388, and 11AX390. It is recommended that these sites be avoided until such time that a formal determination of eligibility through archaeological testing

(i.e. Phase II) or other means can be made. A single historic cemetery within the proposed floodway, the Lake Milligan Cemetery, should also be avoided. All other sites identified and/or investigated during the course of the study are recommended ineligible for NRHP listing. It is recommended that the latter resources be deemed cleared from a cultural resources standpoint.

POTENTIAL FOR BURIED ARCHAEOLOGICAL SITES WITHIN THE PROPOSED FLOODWAY

The potentiality for the occurrence of buried archaeological sites within the proposed floodway was evaluated by project geomorphologist Dr. Randall T. Cox. Dr. Cox offered the following on this subject.

> Results of our geomorphic investigations suggest that the potential for buried archaeological deposits in the floodway is low. Sedimentary sequences encountered in trench excavations and in exploratory drill holes contained no significant buried soils or other evidence of buried landscapes that are less than eight meters below the modern surface. Furthermore, characteristics of these sedimentary horizons are consistent with frequent depositional episodes associated with point bar accretion and overbank flooding of an active and large-scale meander belt. Landforms in this active setting were ephemeral features and would not have been well-suited for occupation sites. The landscape of each terrace level (early Holocene, middle Holocene, and late Holocene) was not stabilized until active deposition ceased when the Mississippi River experienced an episode of entrenchment and concomitantly abandoned the river course associated with the respective terrace [Cox 2004].

Thus, based on Dr. Cox's evaluation, potentially buried archaeological sites within the proposed floodway need not be a major management concern during implementation of the floodway project. However, as noted by Stephens (1995), it is possible a number of archaeological sites lie beneath sands carried into the floodway during the 1993 flood episode. Sand covered areas with previously recorded sites beneath them should be evaluated to determine the latter site's present disposition.

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APPENDIX A
SITE DATA

Trinomial	FN#	Easting (NAD83)	Northing (NAD83)	Latitude	Longitude	vis%	Cover	Soil Association	Elev (ft)	Elev (m)	Setting	N/S	E/W	Area	Field No.	Site Type	Component(s) Present	n Hist	n Abo	N=
11AX100	43	0292796	4106870	37°05'06.8"	89°19'52.3"	50	no till, young winter wheat planted over corn stalks	Lawson-Sawmill-Darwin	325	99,06	north face of low, SW–NE trending ridge	20	10	157	43	Lithic Scatter	Undifferentiated Prehistoric	0	4	4
11AX341	83	0295560	4108078	37°05'48.2"	89°18'01.6"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	western face of a low ridge	200	80	12566	83	Lithic Scatter	Late Archaic-Early Woodland (Possible Earlier Component Also)	0	53	53
11AX361	19	0293388	4105406	37°04'19.8"	89°19'26.9"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	60	60	2827	19	Historic Homesite and Prehistoric Isolate	Late Nineteenth-Mid Twentieth Century and Undifferentiated Prehistoric	43	1	44
11AX368	8	0293157	4106071	37°04'41.2"	89°19'36.9"	50	cultivated field, planted in young winter wheat	Lawson-Sawmill-Darwin	320	97,54	south face of a low ridge	40	30	942	8	Lithic Scatter	Undifferentiated Prehistoric	0	8	8
11AX375	3	0291773	4106550	37°04'55.6"	89°20'33.4"	90	cultivated field, recently tilled	Oakville-Lamont-Alvin	325	99,06	low, NW–SE trending ridge	30	10	236	3	Lithic Scatter	Undifferentiated Prehistoric	0	3	3
11AX376	4	0291791	4106733	37°05'01.6"	89°20'32.8"	90	rocky cultivated field, recently tilled	Oakville-Lamont-Alvin	320	97,54	broad, generally level section of Mississippi River floodplain	1	1	1	4	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX412	18	0293006	4105424	37°04'20.1"	89°19'42.4"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	60	60	2827	18	Historic Homesite and Prehistoric Isolate	Late Nineteenth-Mid Twentieth Century Historic and Undifferentiated Prehistoric	97	1	98
11AX562	1	0291704	4106408	37°04'51.0"	89°20'36.0"	60	cultivated field, planted in young winter wheat	Oakville-Lamont-Alvin	320	97,54	broad, generally level section of Mississippi River floodplain	5	15	59	1	Lithic Scatter	Late Archaic	0	2	2
11AX563	5	0292009	4106175	37°04'43.7"	89°20'23.4"	50	cultivated field, planted in young winter wheat	Oakville-Lamont-Alvin	320	97,54	broad, generally level section of Mississippi River floodplain	10	20	157	5	Lithic and Ceramic Scatter	Woodland (Undifferentiated)	0	5	5
11AX564	6	0292448	4105992	37°04'38.1"	89°20'05.5"	50	cultivated field, planted in young winter wheat	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	5	10	39	6	Lithic Scatter	Undifferentiated Prehistoric	0	2	2
11AX565	7	0291814	4105999	37°04'37.8"	89°20'31.1"	50	no-till field, in bean stubble	Oakville-Lamont-Alvin	320	97,54	broad, generally level section of Mississippi River floodplain	15	15	177	7	Lithic Scatter	Undifferentiated Prehistoric	0	3	3
11AX566	9	0292529	4105954	37°04'36.9"	89°20'02.2"	50	no till, young winter wheat planted over corn stalks	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	10	10	79	9	Lithic Scatter	Undifferentiated Prehistoric	0	2	2

Trinomial	FN#	Easting (NAD83)	Northing (NAD83)	Latitude	Longitude	vis%	Cover	Soil Association	Elev (ft)	Elev (m)	Setting	N/S	E/W	Area	Field No.	Site Type	Component(s) Present	n Hist	n Abo	N=
11AX567	10	0293247	4106057	37°04'40.8"	89°19'33.2"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	north face of a low ridge	10	10	79	10	Lithic Scatter	Undifferentiated Prehistoric	0	3	3
11AX568	11	0292832	4105860	37°04'34.1"	89°19'49.8"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	low natural levee	1	1	1	11	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX569	12	0292766	4105736	37°04'30.0"	89°19'52.4"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	1	1	1	12	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX570	13	0292937	4105753	37°04'30.7"	89°19'45.5"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	5	15	59	13	Lithic Scatter	Undifferentiated Prehistoric	0	2	2
11AX571	14	0293244	4105668	37°04'28.2"	89°19'33.0"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	1	1	1	14	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX572	15	0292804	4105683	37°04'28.4"	89°19'50.8"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	5	5	20	15	Lithic Scatter	Undifferentiated Prehistoric	0	2	2
11AX573	16	0293188	4105570	37°04'25.0"	89°19'35.1"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	1	1	1	16	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX574	17	0292918	4105466	37°04'21.4"	89°19'45.9"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	low natural levee	20	120	1885	17	Lithic Scatter	Undifferentiated Prehistoric	0	7	7
11AX575	20	0293587	4105441	37°04'21.1"	89°19'18.9"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	edge of broad depression to north	5	15	59	20	Lithic Scatter	Late Archaic	0	3	3
11AX576	21	0292534	4105552	37°04'23.9"	89°20'01.6"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	30	30	707	21	Lithic Scatter	Undifferentiated Prehistoric	0	10	10
11AX577	22	0292641	4105466	37°04'21.2"	89°19'57.2"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	western margin of a ridge terminus	60	20	942	22	Lithic Scatter	Undifferentiated Prehistoric	0	8	8
11AX578	23	0292726	4105514	37°04'22.8"	89°19'53.8"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	10	10	79	23	Lithic Scatter	Terminal Middle-Early Late Woodland	0	3	3
11AX579	24	0292761	4105437	37°04'20.3"	89°19'52.2"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	eastern margin of a ridge projection	20	50	785	24	Lithic Scatter	Late Archaic	0	15	15
11AX580	40	0292220	4106855	37°20'15.6"	89°20'15.6"	50	cultivated field, disced corn stalks	Oakville-Lamont-Alvin	320	97,54	broad, generally level section of Mississippi River floodplain	1	1	1	40	Isolated Find	Undifferentiated Prehistoric	0	1	1

Trinomial	FN#	Easting (NAD83)	Northing (NAD83)	Latitude	Longitude	vis%	Cover	Soil Association	Elev (ft)	Elev (m)	Setting	N/S	E/W	Area	Field No.	Site Type	Component(s) Present	n Hist	n Abo	N=
11AX581	41	0292128	4107004	37°05'10.7"	89°20'19.4"	100	cultivated field, recently tilled	Oakville-Lamont-Alvin	325	99,06	margin of remodeled terrace feature to north	50	50	1963	41	Historic Homesite and Prehistoric Lithic Scatter	Late Nineteenth-Mid Twentieth Century Historic and Undifferentiated Prehistoric	30	2	32
11AX582	42	0292059	4106629	37°04'58.4"	89°20'21.9"	75	cultivated field, recently tilled	Oakville-Lamont-Alvin	320	97,54	broad, generally level section of Mississippi River floodplain	20	20	314	42	Historic Homesite and Prehistoric Lithic Scatter	Late Nineteenth-Early Twentieth Century Historic and Early Woodland	17	3	20
11AX583	52	0293393	4106960	37°05'10.2"	89°19'28.2"	90	cultivated, gravelly field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	50	20	785	52	Lithic Scatter	Undifferentiated Prehistoric	0	10	10
11AX584	53	0293601	4106964	37°05'10.5"	89°19'19.8"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	1	1	1	53	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX585	54	0293859	4106943	37°05'10.0"	89°19'09.3"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	5	5	20	54	Lithic Scatter	Undifferentiated Prehistoric	0	3	3
11AX586	55	0293984	4106950	37°05'10.4"	89°19'04.3"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	50	20	785	55	Lithic Scatter	Undifferentiated Prehistoric	0	9	9
11AX587	56	0294086	4106915	37°05'09.3"	89°19'00.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	20	20	314	56	Untyped Historic Scatter and Prehistoric Lithic Scatter	Early-Mid Twentieth Century Historic and Undifferentiated Prehistoric	2	2	4
11AX588	57	0293540	4106898	37°05'08.3"	89°19'22.2"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	15	15	177	57	Lithic Scatter	Undifferentiated Prehistoric	0	4	4
11AX589	58	0293688	4106846	37°05'06.8"	89°19'16.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	100	30	2356	58	Lithic Scatter	Undifferentiated Prehistoric	0	9	9
11AX590	59	0293541	4106860	37°05'07.1"	89°19'22.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	low ridge	10	10	79	59	Lithic Scatter	Undifferentiated Prehistoric	0	2	2

Trinomial	FN#	Easting (NAD83)	Northing (NAD83)	Latitude	Longitude	vis%	Cover	Soil Association	Elev (ft)	Elev (m)	Setting	N/S	E/W	Area	Field No.	Site Type	Component(s) Present	n Hist	n Abo	N=
11AX591	60	0293442	4106827	37°05'06.0"	89°19'26.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	30	60	1414	60	Lithic Scatter	Undifferentiated Prehistoric	0	7	7
11AX592	61	0293597	4106793	37°05'05.0"	89°19'19.8"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	10	10	79	61	Lithic Scatter	Undifferentiated Prehistoric	0	11	11
11AX593	62	0293897	4106781	37°05'04.8"	89°19'07.6"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	30	30	707	62	Prehistoric Lithic Scatter and Untyped Historic Scatter	Undifferentiated Prehistoric and Late Nineteenth-Mid Twentieth Century Historic	11	7	18
11AX594	63	0294070	4106768	37°05'04.5"	89°19'00.6"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	low natural levee	50	150	5890	63	Prehistoric Lithic Scatter and Historic Isolate	Late Archaic and Unknown Historic	1	51	52
11AX595	64	0293405	4106794	37°05'04.8"	89°19'27.6"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	15	15	177	64	Lithic Scatter	Undifferentiated Prehistoric	0	17	17
11AX596	65	0293501	4106771	37°05'04.2"	89°19'23.6"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	15	15	177	65	Lithic Scatter	Undifferentiated Prehistoric (Possibly Archaic)	0	5	5
11AX597	66	0293810	4106762	37°05'04.1"	89°19'11.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	70	40	2199	66	Prehistoric Lithic Scatter and Historic Homesite	Undifferentiated Prehistoric and Early Twentieth Century Historic	15	19	34
11AX598	67	0293709	4106666	37°05'01.1"	89°19'15.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	30	30	707	67	Lithic Scatter	Undifferentiated Prehistoric	0	10	10
11AX599	68	0293883	4106640	37°05'00.2"	89°19'08.1"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	10	10	79	68	Lithic Scatter	Terminal Archaic	0	5	5
11AX600	69	0294044	4106590	37°04'58.7"	89°19'01.5"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	broad, generally level section of Mississippi River floodplain	20	30	471	69	Lithic Scatter	Undifferentiated Prehistoric	0	11	11

Trinomial	FN#	Easting (NAD83)	Northing (NAD83)	Latitude	Longitude	vis%	Cover	Soil Association	Elev (ft)	Elev (m)	Setting	N/S	E/W	Area	Field No.	Site Type	Component(s) Present	n Hist	n Abo	N=
11AX601	70	0294276	4106677	37°05'01.8"	89°18'52.2"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	margin of remodeled terrace feature	1	1	1	70	Lithic Scatter	Undifferentiated Prehistoric	0	4	4
11AX602	71	0294335	4106762	37°05'04.6"	89°18'49.9"	80	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	margin of remodeled terrace feature	80	50	3142	71	Prehistoric Lithic Scatter and Untyped Historic Scatter	Terminal Archaic, Early Woodland, Late Woodland-Mississippian and Late Nineteenth-Early Twentieth Century Historic	8	106	114
11AX603	72	0294359	4106878	37°05'08.3"	89°18'49.0"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	margin of remodeled terrace or old natural levee	40	40	1257	72	Lithic Scatter and Historic Isolate	Undifferentiated Prehistoric and Late Nineteenth-Early Twentieth Century Historic	1	22	23
11AX604	78	0287671	4110977	37°07'15.9"	89°23'23.9"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	325	99,06	broad, generally level section of Mississippi River floodplain	10	10	79	78	Lithic Scatter	Undifferentiated Prehistoric	0	3	3
11AX605	79	0288118	4110510	37°07'01.1"	89°23'05.3"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	325	99,06	broad, generally level section of Mississippi River floodplain	20	10	157	79	Lithic Scatter	Undifferentiated Prehistoric	0	10	10
11AX606	80	0287733	4110858	37°07'12.1"	89°23'21.2"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	325	99,06	broad, generally level section of Mississippi River floodplain	1	1	1	80	Isolated Find	Undifferentiated Prehistoric	0	1	1
11AX607	81	0295348	4107902	37°05'42.3"	89°18'10.0"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	margin of remodeled terrace feature	30	30	707	81	Historic Homesite	Late Nineteenth-Early Twentieth Century	18	0	18
11AX608	82	0295394	4108024	37°05'46.3"	89°18'08.3"	100	cultivated field, recently tilled	Lawson-Sawmill-Darwin	320	97,54	eastern face of a low ridge	80	20	1257	82	Lithic Scatter	Terminal Middle Woodland	0	54	54
N/A	2	0291852	4106912	37°05'07.4"	89°20'30.5"	90	cultivated field, recently tilled	Lawson-Sawmill-Darwin	325	99,06	low, NE–SW trending ridge	80	240	15080	2	Lithic Scatter (extensive)	Late Archaic	0	105	105
																		243	**636**	**879**

APPENDIX B
ARTIFACT INVENTORY

					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX100	43	primary biface	small	1	-	-	-	-	-	-	Mounds Gravel?
11AX100	43	secondary flake		1	-	1	-	-	-	-	
11AX100	43	tertiary biface	probable PP/k distal	1	-	-	-	-	-	-	Other Chert
11AX100	43	tertiary flake		1	-	1	-	-	-	-	
			11AX100 Total=	***4***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX341	83	bifacial thinning flake	fragment	1	-	-	-	-	-	-	
11AX341	83	cobble core		2	-	-	-	-	-	-	Other Chert (1); Mounds Gravel (1)
11AX341	83	core fragment		2	-	-	-	-	-	-	Mounds Gravel (1); Other Chert (1)
11AX341	83	core trimming flake		1	-	-	-	-	-	-	Mill Creek Chert
11AX341	83	exhausted core		1	-	-	-	-	-	-	Mounds Gravel
11AX341	83	FCR		1	-	-	-	-	-	-	
11AX341	83	flake fragment		20	-	-	-	-	-	-	
11AX341	83	hammer stone	small pebble	1	-	-	-	-	-	-	Mounds Gravel
11AX341	83	PP/k fragment, untyped broad expanding stemmed		1	-	-	-	-	-	-	Kaolin Chert
11AX341	83	PP/k, Dickson Cluster (Little Bear Creek to small Adena or Hebron Turkey Tail-like due to barbs)		1	-	-	-	-	-	-	Other Chert
11AX341	83	secondary biface	possible adze	1	-	-	-	-	-	-	Bailey Chert
11AX341	83	secondary biface fragment		6	-	-	-	-	-	-	Kornthal Chert (1); Mill Creek Chert (1); Other Chert (4)
11AX341	83	spokeshave		1	-	-	-	-	-	-	Other Chert
11AX341	83	tertiary flake		7	-	3	4	-	-	-	
11AX341	83	unifacial scraper		4	-	-	-	-	-	-	Bailey Chert (1); Clear Creek Chert (1); Kornthal Chert (1); Other Chert (1)
11AX341	83	untyped scraper		2	-	-	-	-	-	-	Kornthal Chert (1); Other Chert (1)
11AX341	83	utilized flake		1	-	-	-	-	-	-	
			11AX341 Total=	***53***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX361	19	brick fragment		1	-	-	-	-	-	-	
11AX361	19	container glass, medicine bottle	clear	1	-	-	-	-	-	-	
11AX361	19	container glass	amethyst	2	-	-	-	-	-	-	
11AX361	19	container glass	light green	1	-	-	-	-	-	-	
11AX361	19	container glass	aqua	2	-	-	-	-	-	-	

11AX361	19	container glass	aqua	2	-	-	-	-	-	-	
11AX361	19	container glass	clear	2	-	-	-	-	-	-	
11AX361	19	container glass, base fragment	clear	1	-	-	-	-	-	-	
11AX361	19	container glass, base fragment	aqua	2	-	-	-	-	-	-	
11AX361	19	container glass, crown neck finish	aqua	1	-	-	-	-	-	-	
11AX361	19	container glass, patent neck finish	amber, patinated	1	-	-	-	-	-	-	
11AX361	19	container glass, patent neck finish	amethyst	1	-	-	-	-	-	-	
11AX361	19	earthenware	brown glaze	1	-	-	-	-	-	-	
11AX361	19	exhausted core		1	-	-	-	-	-	-	Other Chert
11AX361	19	metal hook		1	-	-	-	-	-	-	
11AX361	19	stoneware, buff paste	unid. slip	9	-	-	-	-	-	-	
11AX361	19	stoneware, gray paste	unid. slip int./salt glaze ext.	4	-	-	-	-	-	-	
11AX361	19	whiteware, plain	crazed=9	10	-	-	-	-	-	-	
11AX361	19	whiteware, unid. maker's mark	"INA" w/ unicorn	1	-	-	-	-	-	-	
			11AX361 Total=	***44***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX368	8	bifacial thinning flake	fragmented, utilized as spokeshave	1	-	-	-	-	-	-	
11AX368	8	bifacial thinning flake	fragmented	1	-	-	-	-	-	-	
11AX368	8	flake fragment		2	-	-	-	-	-	-	
11AX368	8	secondary biface fragment	heavily fire spalled	1	-	-	-	-	-	-	Other Chert
11AX368	8	secondary flake		1	1	-	-	-	-	-	
11AX368	8	tertiary flake		2	1	1	-	-	-	-	
			11AX368 Total=	***8***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX375	3	primary biface fragment		1	-	-	-	-	-	-	Bailey Chert
11AX375	3	secondary flake		1	-	-	-	1	-	-	
11AX375	3	unifacial scraper		1	-	-	-	-	-	-	Other Chert
			11AX375 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX376	4	untyped scraper		1	-	-	-	-	-	-	Other Chert
			11AX376 Total=	***1***							

					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX412	18	battery core		1	-	-	-	-	-	-	
11AX412	18	brick fragment		1	-	-	-	-	-	-	
11AX412	18	canning seal lid, complete	amethyst glass, "PATD JANY"	1	-	-	-	-	-	-	
11AX412	18	canning seal lid fragment		3	-	-	-	-	-	-	
11AX412	18	canning seal lid, complete	"LINED D BOYD'S GENUINE PORCELAIN"	1	-	-	-	-	-	-	
11AX412	18	CC Ware	yellow glaze, crazed	1	-	-	-	-	-	-	
11AX412	18	container glass	amber	2	-	-	-	-	-	-	
11AX412	18	container glass	clear	3	-	-	-	-	-	-	
11AX412	18	container glass	amethyst	3	-	-	-	-	-	-	
11AX412	18	container glass	patina=1, embossed=1 "BOTT"	3	-	-	-	-	-	-	
11AX412	18	container glass	aqua	3	-	-	-	-	-	-	
11AX412	18	container glass, bead neck finish	amethyst	1	-	-	-	-	-	-	
11AX412	18	container glass, crown neck finish	aqua	1	-	-	-	-	-	-	
11AX412	18	container glass, patent neck finish	clear	1	-	-	-	-	-	-	
11AX412	18	container glass, unid. neck finish	amethyst	1	-	-	-	-	-	-	
11AX412	18	container glass, unid. neck finish	clear	1	-	-	-	-	-	-	
11AX412	18	container glass, wine or brandy neck finish	amethyst	4	-	-	-	-	-	-	
11AX412	18	container glass, wine or brandy neck finish	clear	3	-	-	-	-	-	-	
11AX412	18	flake fragment		1	-	-	-	-	-	-	
11AX412	18	flat glass	clear	1	-	-	-	-	-	-	
11AX412	18	glass stopper	amethyst	1	-	-	-	-	-	-	
11AX412	18	ironstone, decorated	green floral transfer print	1	-	-	-	-	-	-	
11AX412	18	ironstone, plain		1	-	-	-	-	-	-	
11AX412	18	metal claw-hammer head		1	-	-	-	-	-	-	
11AX412	18	metal hinge		1	-	-	-	-	-	-	
11AX412	18	metal saddle horn		1	-	-	-	-	-	-	
11AX412	18	milk glass		1	-	-	-	-	-	-	
11AX412	18	pad lock	"St Louis"	1	-	-	-	-	-	-	
11AX412	18	porcelain, maker's mark	"PAN"	1	-	-	-	-	-	-	
11AX412	18	porcelain, plain		1	-	-	-	-	-	-	
11AX412	18	spoon		1	-	-	-	-	-	-	

11AX412	18	stoneware, buff paste	unid. slip	17	-	-	-	-	-	-	
11AX412	18	stoneware, buff paste	albany slip int/ext	2	-	-	-	-	-	-	
11AX412	18	stoneware, gray paste	unid. slip	10	-	-	-	-	-	-	
11AX412	18	unid. metal		3	-	-	-	-	-	-	
11AX412	18	whiteware, decorated	pink/green floral decal, crazed	1	-	-	-	-	-	-	
11AX412	18	whiteware, decorated	brown annular, crazed	1	-	-	-	-	-	-	
11AX412	18	whiteware, decorated	blue transfer print, crazed	1	-	-	-	-	-	-	
11AX412	18	whiteware, maker's mark	"...ER LAUGHLIN /...ADE IN U.S.A." crazed (ca. 1900-1960)	1	-	-	-	-	-	-	
11AX412	18	whiteware, maker's mark	unidentified	1	-	-	-	-	-	-	
11AX412	18	whiteware, maker's mark	"...E CHINA" w/ unicorn, crazed	1	-	-	-	-	-	-	
11AX412	18	whiteware, plain	crazed= 11	13	-	-	-	-	-	-	
			11AX412 Total=	***98***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	n=	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX562	1	broken flake		1	-	-	-	-	-	-	
11AX562	1	PP/k, Merom-like		1	-	-	-	-	-	-	Other Chert
			11AX562 Total=	***2***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	n=	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX563	5	adze		1	-	-	-	-	-	-	Mill Creek Chert
11AX563	5	body sherd	clay tempered, erroded	1	-	-	-	-	-	-	
11AX563	5	exhausted core		1	-	-	-	-	-	-	Other Chert
11AX563	5	flake fragment		1	-	-	-	-	-	-	
11AX563	5	secondary biface	keeled, reutilized as spokeshave	1	-	-	-	-	-	-	Kornthal Chert
			11AX563 Total=	***5***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	n=	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX564	6	flake fragment		2	-	-	-	-	-	-	
			11AX564 Total=	***2***							

					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX565	7	tertiary flake		1	-	-	-	-	-	-	
11AX565	7	unifacial scraper		1	-	-	-	-	-	-	Mounds Gravel
11AX565	7	utilized flake	fragmentary	1	-	-	-	-	-	-	
			11AX565 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX566	9	broken flake		1	-	-	-	-	-	-	
11AX566	9	secondary flake		1	-	-	-	1	-	-	
			11AX566 Total=	***2***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX567	10	flake fragment	thermally altered=1	1	-	-	-	-	-	-	
11AX567	10	primary biface		1	-	-	-	-	-	-	Clear Creek Chert?
11AX567	10	tertiary flake		1	-	-	1	-	-	-	
			11AX567 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX568	11	FCR	flake-like	1	-	-	-	-	-	-	
			11AX568 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX569	12	tested cobble		1	-	-	-	-	-	-	Mounds Gravel
			11AX569 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX570	13	primary flake		1	-	-	1	-	-	-	
11AX570	13	secondary biface		1	-	-	-	-	-	-	Undifferentiated St. Louis Chert
			11AX570 Total=	***2***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**

11AX571	14	blade flake		1	-	-	-	-	-	-	
			11AX571 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX572	15	flake fragment		1	-	-	-	-	-	-	
11AX572	15	tertiary flake		1	-	1	-	-	-	-	
			11AX572 Total=	***2***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX573	16	utilized flake		1	-	-	-	-	-	-	
			11AX573 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX574	17	primary biface fragment		2	-	-	-	-	-	-	Mounds Gravel (1); Other Chert (1)
11AX574	17	tertiary flake		1	-	1	-	-	-	-	
11AX574	17	tested cobble	possible fragmented hammerstone	1	-	-	-	-	-	-	Orthoquartzite
11AX574	17	untyped scraper		2	-	-	-	-	-	-	Mill Creek Chert
11AX574	17	utilized flake		1	-	-	-	-	-	-	
			11AX574 Total=	***7***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX575	20	flake fragment		1	-	-	-	-	-	-	
11AX575	20	PP/k, untyped micro-auriculate (Matanzas Cluster-Brewerton Eared-Notched?)		1	-	-	-	-	-	-	Other Chert
11AX575	20	shatter		1	-	-	-	-	-	-	
			11AX575 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX576	21	flake fragment		5	-	-	-	-	-	-	
11AX576	21	primary flake		1	-	-	-	1	-	-	
11AX576	21	secondary flake		1	-	-	1	-	-	-	

11AX576	21	tertiary flake		1	-	-	-	1	-	-	
11AX576	21	utilized flake		2	-	-	-	-	-	-	
			11AX576 Total=	***10***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX577	22	flake fragment		2	-	-	-	-	-	-	
11AX577	22	tertiary flake		4	-	-	1	2	1	-	
11AX577	22	untyped scraper	fragmentary	2	-	-	-	-	-	-	Other Chert (1); Undifferentiated St. Louis Chert (1)
			11AX577 Total=	***8***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX578	23	PP/k, Steuben-like		1	-	-	-	-	-	-	Kaolin Chert?
11AX578	23	primary biface		1	-	-	-	-	-	-	Other Chert
11AX578	23	tertiary flake		1	-	1	-	-	-	-	
			11AX578 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX579	24	bifacial thinning flake		1	-	-	-	-	-	-	
11AX579	24	core fragment		1	-	-	-	-	-	-	Other Chert
11AX579	24	FCR		1	-	-	-	-	-	-	
11AX579	24	flake fragment		1	-	-	-	-	-	-	
11AX579	24	PP/k fragment, Late Archaic Stemmed Cluster (Karnak Stemmed?)		1	-	-	-	-	-	-	Kaolin Chert?
11AX579	24	primary biface		2	-	-	-	-	-	-	Mounds Gravel (1); Kornthal Chert (1)
11AX579	24	primary biface fragment		3	-	-	-	-	-	-	Cobden/Dongola Chert (1); Other Chert (2)
11AX579	24	secondary biface		1	-	-	-	-	-	-	Mill Creek Chert
11AX579	24	secondary biface	portions of margins unifacially modified	1	-	-	-	-	-	-	Cobden/Dongola Chert
11AX579	24	secondary biface fragment		1	-	-	-	-	-	-	Mill Creek Chert (thermally altered)
11AX579	24	untyped scraper	crude, utilized core-like	1	-	-	-	-	-	-	Mounds Gravel
11AX579	24	untyped scraper	modified in several margin locations, was possibly a large bifacial thinning flake originally	1	-	-	-	-	-	-	Mounds Gravel?
			11AX579 Total=	***15***							

					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX580	40	unifacial scraper	fragmentary	1	-	-	-	-	-	-	Other Chert
			11AX580 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX581	41	bolt	0.5" x 1.25"	1	-	-	-	-	-	-	
11AX581	41	ceramic drainage pipe fragment		1	-	-	-	-	-	-	
11AX581	41	container glass	amethyst	1	-	-	-	-	-	-	
11AX581	41	container glass	clear	2	-	-	-	-	-	-	
11AX581	41	container glass	light green	1	-	-	-	-	-	-	
11AX581	41	container glass	aqua	2	-	-	-	-	-	-	
11AX581	41	electric insulator	ceramic	1	-	-	-	-	-	-	
11AX581	41	flake fragment		2	-	-	-	-	-	-	
11AX581	41	glass bottle w/ metal screw top	clear, "PHENIQUE CHEMICAL COMPANY ST. LOUIS, MO"	1	-	-	-	-	-	-	
11AX581	41	milk glass		6	-	-	-	-	-	-	
11AX581	41	porcelain	yellow glaze	1	-	-	-	-	-	-	
11AX581	41	porcelain		2	-	-	-	-	-	-	
11AX581	41	stoneware, buff paste	unid. slip	5	-	-	-	-	-	-	
11AX581	41	whiteware, plain	crazed=3	6	-	-	-	-	-	-	
			11AX581 Total=	***32***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX582	42	container glass	amethyst	2	-	-	-	-	-	-	
11AX582	42	container glass	light amethyst	1	-	-	-	-	-	-	
11AX582	42	container glass	light aqua, embossed=1 "NC"	3	-	-	-	-	-	-	
11AX582	42	container glass, base fragment	light aqua, "PATD JAN. 5, 75"	1	-	-	-	-	-	-	
11AX582	42	flake fragment		5	-	-	-	-	-	-	
11AX582	42	playing marble fragment, glass	blue, red, and green	1	-	-	-	-	-	-	
11AX582	42	PP/k fragment, untyped (Adena-like) extended rounded stemmed		1	-	-	-	-	-	-	Mounds Gravel
11AX582	42	stoneware, buff paste	unid. slip	2	-	-	-	-	-	-	

11AX582	42	stoneware, gray paste	unid. slip	2	-	-	-	-	-	-	
11AX582	42	untyped scraper		1	-	-	-	-	-	-	Kornthal Chert
11AX582	42	whiteware, plain		1	-	-	-	-	-	-	
			11AX582 Total=	***20***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX583	52	flake fragment		7	-	-	-	-	-	-	
11AX583	52	tertiary flake		3	-	2	-	1	-	-	
			11AX583 Total=	***10***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX584	53	cobble core		1	-	-	-	-	-	-	Cobden/Dongola Chert
			11AX584 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX585	54	cobble core	utilized as scraper	1	-	-	-	-	-	-	Bailey Chert?
11AX585	54	secondary flake		1	-	-	-	1	-	-	
11AX585	54	tertiary flake		1	-	-	-	-	1	-	
			11AX585 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX586	55	exhausted core		1	-	-	-	-	-	-	Other Chert
11AX586	55	flake fragment		1	-	-	-	-	-	-	
11AX586	55	hammerstone		1	-	-	-	-	-	-	Orthoquartzite
11AX586	55	tertiary flake		2	-	-	2	-	-	-	
11AX586	55	unifacial scraper	possible haft element of endscraper	1	-	-	-	-	-	-	Undifferentiated St. Louis
11AX586	55	untyped scraper		1	-	-	-	-	-	-	Kornthal Chert
11AX586	55	utilized flake		2	-	-	-	-	-	-	
			11AX586 Total=	***9***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX587	56	flake fragment		1	-	-	-	-	-	-	

11AX587	56	electric insulator post	ceramic	1	-	-	-	-	-	-	
11AX587	56	ironstone, plain		1	-	-	-	-	-	-	
11AX587	56	untyped scraper	spokeshave-like	1	-	-	-	-	-	-	Other Chert
			11AX587 Total=	***4***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX588	57	blade flake		1	-	-	-	-	-	-	
11AX588	57	flake fragment		1	-	-	-	-	-	-	
11AX588	57	core trimming flake		1	-	-	-	1	-	-	Other Chert
11AX588	57	secondary biface fragment		1	-	-	-	-	-	-	Bailey Chert
			11AX588 Total=	***4***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX589	58	core fragment		1	-	-	-	-	-	-	Mill Creek Chert (thermally altered)
11AX589	58	flake fragment		4	-	-	-	-	-	-	
11AX589	58	primary flake		1	-	-	-	-	-	1	
11AX589	58	unifacial scraper	with graver-like projection	1	-	-	-	-	-	-	Cobden/Dongola Chert
11AX589	58	untyped scraper		2	-	-	-	-	-	-	Other Chert (1); Mounds Gravel (1)
			11AX589 Total=	***9***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX590	59	celt preform	utilized, polish on bit	1	-	-	-	-	-	-	Kornthal Chert
11AX590	59	untyped scraper		1	-	-	-	-	-	-	Mill Creek Chert (thermally altered)
			11AX590 Total=	***2***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
11AX591	60	bifacial thinning flake	fragment	1	-	-	-	-	-	-	
11AX591	60	flake fragment		2	-	-	-	-	-	-	
11AX591	60	primary biface	possible adze preform	1	-	-	-	-	-	-	Mounds Gravel (quartzite)
11AX591	60	tested cobble		1	-	-	1	1	-	1	Other Chert
11AX591	60	utilized flake		2	-	-	1	1	-	1	
			11AX591 Total=	***7***							
					Size Grade						

Trinomial	FN	Artifact Category	Comments	n=	1	2	3	4	5	>5	Raw Material
11AX592	61	bifacial thinning flake		2	-	-	-	-	-	-	
11AX592	61	blade flake		1	-	-	-	-	-	-	
11AX592	61	cobble core		1	-	-	-	-	-	-	Mounds Gravel
11AX592	61	flake fragment		4	-	-	-	-	-	-	
11AX592	61	secondary flake		1	-	-	1	-	-	-	
11AX592	61	tertiary flake		2	-	-	1	1	-	-	
			11AX592 Total=	*11*							
					Size Grade						
Trinomial	FN	Artifact Category	Comments	n=	1	2	3	4	5	>5	Raw Material
11AX593	62	coal		1	-	-	-	-	-	-	
11AX593	62	container glass	amber	1	-	-	-	-	-	-	
11AX593	62	container glass	aqua	2	-	-	-	-	-	-	
11AX593	62	container glass	clear	1	-	-	-	-	-	-	
11AX593	62	core fragment		1	-	-	-	-	-	-	Other Chert
11AX593	62	flake fragment		4	-	-	-	-	-	-	
11AX593	62	flat glass	light aqua	1	-	-	-	-	-	-	
11AX593	62	stoneware, buff paste	unid. slip	2	-	-	-	-	-	-	
11AX593	62	stoneware, gray paste	unid. slip	1	-	-	-	-	-	-	
11AX593	62	tertiary flake		2	-	1	-	1	-	-	
11AX593	62	whiteware, plain	crazed	1	-	-	-	-	-	-	
11AX593	62	whiteware decorated	blue transfer print, crazed	1	-	-	-	-	-	-	
			11AX593 Total=	*18*							
					Size Grade						
Trinomial	FN	Artifact Category	Comments	n=	1	2	3	4	5	>5	Raw Material
11AX594	63	bifacial thinning flake		2	-	-	-	-	-	-	
11AX594	63	exhausted core		3	-	-	-	-	-	-	Other Chert (2); Mounds Gravel? (1)
11AX594	63	FCR		4	-	-	-	-	-	-	
11AX594	63	flake fragment		16	-	-	-	-	-	-	
11AX594	63	PP/k fragment, Late Archaic Stemmed Cluster (McWhinney-like)		1	-	-	-	-	-	-	Other Chert
11AX594	63	PP/k fragment, Motley-like		1	-	-	-	-	-	-	Other Chert
11AX594	63	primary biface		1	-	-	-	-	-	-	Mill Creek Chert (1)
11AX594	63	primary biface fragment		2	-	-	-	-	-	-	Korthall Chert (1); Other Chert (1)
11AX594	63	secondary biface		2	-	-	-	-	-	-	Mounds Gravel (1); Mill Creek Chert (1)
11AX594	63	secondary biface fragment		5	-	-	-	-	-	-	Mill Creek Chert (2); Other Chert (1);

											Kornthal Chert (1)
11AX594	63	secondary flake		1	-	-	-	1	-	-	
11AX594	63	tertiary biface fragment	probably PP/k distal	1	-	-	-	-	-	-	Bailey Chert
11AX594	63	tertiary biface fragment	fire spalled	1	-	-	-	-	-	-	Other Chert
11AX594	63	tertiary biface fragment		3	-	-	-	-	-	-	Mill Creek Chert (thermally altered) (1); Other Chert (1); Cobden/Dongola Chert (1)
11AX594	63	tertiary flake		4	1	-	2	1	1	-	
11AX594	63	unifacial scraper		2	-	-	-	-	-	-	Other Chert
11AX594	63	unifacial scraper	fragmentary	1	-	-	-	-	-	-	Cobden/Dongola Chert
11AX594	63	untyped scraper		1	-	-	-	-	-	-	Other Chert
11AX594	63	whiteware, unid. maker's mark	crazed	1	-	-	-	-	-	-	
			11AX594 Total=								
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX595	64	flake fragment		7	-	-	-	-	-	-	
11AX595	64	hammerstone		2	-	-	-	-	-	-	igneous (unidentified)
11AX595	64	primary flake		1	-	-	-	-	1	-	
11AX595	64	tertiary flake		5	-	2	2	-	1	-	
11AX595	64	unifacial scraper		1	-	-	-	-	-	-	Kaolin Chert?
11AX595	64	untyped scraper		1	-	-	-	-	-	-	unknown
			11AX595 Total=	***17***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX596	65	groundstone	possible humped bannerstone	1	-	-	-	-	-	-	igneous (unidentified)
11AX596	65	untyped scraper		1	-	-	-	-	-	-	Kornthal Chert
11AX596	65	utilized flake		3	-	-	-	-	-	-	
			11AX596 Total=	***5***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX597	66	bifacial thinning flake		1	-	-	-	-	-	-	
11AX597	66	canning seal lid fragment		1	-	-	-	-	-	-	
11AX597	66	celt fragment		1	-	-	-	-	-	-	igneous (greenstone)
11AX597	66	cobble core		1	-	-	-	-	-	-	Mounds Gravel
11AX597	66	container glass	amber	1	-	-	-	-	-	-	

11AX597	66	container glass	aqua	1	-	-	-	-	-	-	
11AX597	66	container glass	clear, embossed=1, "INE"	2	-	-	-	-	-	-	
11AX597	66	container glass, double ring neck finish	light aqua	1	-	-	-	-	-	-	
11AX597	66	flake fragment		5	-	-	-	-	-	-	
11AX597	66	flat glass	light aqua	1	-	-	-	-	-	-	
11AX597	66	ironstone, plain		1	-	-	-	-	-	-	
11AX597	66	milk glass		1	-	-	-	-	-	-	
11AX597	66	porcelain, plain		1	-	-	-	-	-	-	
11AX597	66	primary biface		2	-	-	-	-	-	-	Mill Creek Chert (1); Other Chert (1)
11AX597	66	primary biface fragment		1	-	-	-	-	-	-	Cobden/Dongola Chert
11AX597	66	secondary biface	adze preform	1	-	-	-	-	-	-	Kornthall Chert
11AX597	66	secondary biface fragment		2	-	-	-	-	-	-	Cobden/Dongola Chert (1); Mill Creek Chert (thermally altered) (1)
11AX597	66	stoneware, gray paste	unid. slip	3	-	-	-	-	-	-	
11AX597	66	tertiary flake		2	-	1	1	-	-	-	
11AX597	66	unifacial scraper		1	-	-	-	-	-	-	Other Chert
11AX597	66	untyped scraper		2	-	-	-	-	-	-	Bailey Chert? (1); Other Chert (1)
11AX597	66	whiteware, plain	crazed	2	-	-	-	-	-	-	
			11AX597 Total=	***34***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX598	67	exhausted core		1	-	-	-	-	-	-	Kaolin Chert
11AX598	67	flake fragment		3	-	-	-	-	-	-	
11AX598	67	secondary flake		1	-	-	1	-	-	-	
11AX598	67	shaped core		1	-	-	-	-	-	-	Kaolin Chert
11AX598	67	shatter		1	-	-	-	-	-	-	
11AX598	67	unifacial scraper	fragmentary	1	-	-	-	-	-	-	Bailey Chert
11AX598	67	unifacial scraper	also has spokeshave indention	1	-	-	-	-	-	-	Bailey Chert
11AX598	67	untyped scraper		1	-	-	-	-	-	-	Other Chert
			11AX598 Total=	***10***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX599	68	exhausted core		1	-	-	-	-	-	-	Mill Creek Chert
11AX599	68	flake fragment		2	-	-	-	-	-	-	
11AX599	68	PP/k, Terminal Archaic Barbed Cluster (Buck Creek Barbed?)		1	-	-	-	-	-	-	undifferentiated Mississippian-aged Chert

11AX599	68	secondary flake		1	-	-	-	-	1	-	
			11AX599 Total=	***5***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX600	69	bifacial thinning flake	reutilized margins	1	-	-	-	-	-	-	Other Chert
11AX600	69	core trimming flake		1	-	-	-	1	-	-	
11AX600	69	flake fragment		4	-	-	-	-	-	-	
11AX600	69	secondary biface	adze preform (possible just not utilized)	1	-	-	-	-	-	-	Kornthall Chert (1)
11AX600	69	tertiary flake		2	-	2	-	-	-	-	
11AX600	69	unifacial scraper	fragmentary	2	-	-	-	-	-	-	Cobden/Dongola Chert (1); Undifferntiated Mississippian-aged Chert (1)
			11AX600 Total=	***11***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX601	70	tertiary flake		2	-	1	1	-	-	-	
11AX601	70	unifacial scraper	fragmentary	1	-	-	-	-	-	-	Other Chert
11AX601	70	untyped scraper	possible crude spokeshave	1	-	-	-	-	-	-	Other Chert
			11AX601 Total=	***4***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX602	71	bifacial thinning flake		2	-	-	-	-	-	-	
11AX602	71	bottle glass, neck finish	amethyst, crown finish	2	-	-	-	-	-	-	
11AX602	71	bottle glass, neck finish	clear, collared ring finish	1	-	-	-	-	-	-	
11AX602	71	celt fragment		1	-	-	-	-	-	-	igneous (undifferentiated)
11AX602	71	core fragment	fire spalled	1	-	-	-	-	-	-	Other Chert
11AX602	71	core fragment		2	-	-	-	-	-	-	Mill Creek Chert (thermally altered) (1); Other Chert (1)
11AX602	71	flake fragment		29	-	-	-	-	-	-	
11AX602	71	groundstone		1	-	-	-	-	-	-	igneous (undifferentiated)
11AX602	71	ironstone, decorated	blue painted	1	-	-	-	-	-	-	
11AX602	71	polished flake		1	-	-	-	-	-	-	
11AX602	71	pp/k fragment, likely Terminal Archaic Barbed Cluster (missing portion of stem)		1	-	-	-	-	-	-	Bailey Chert
11AX602	71	PP/k, Cypress Stemmed-like (missing		1	-	-	-	-	-	-	Mounds Gravel

		extreme distal end)									
11AX602	71	PP/k, Cypress Stemmed-like (missing portion of distal end)		1	-	-	-	-	-	-	Mounds Gravel
11AX602	71	PP/k, Sequoyah-like (missing distal and barbs)		1	-	-	-	-	-	-	Other Chert
11AX602	71	primary biface		2	-	-	-	-	-	-	Mill Creek Chert (1); Other Chert (1)
11AX602	71	primary biface fragment		3	-	-	-	-	-	-	Mill Creek Chert (1); Bailey Chert (1); Undifferentiated Mississippian-aged Chert (1)
11AX602	71	primary flake		2	-	1	-	1	-	-	
11AX602	71	secondary biface		1	-	-	-	-	-	-	Bailey Chert
11AX602	71	secondary biface fragment		1	-	-	-	-	-	-	Cobden/Dongola Chert
11AX602	71	secondary flake		8	-	1	3	3	1	-	
11AX602	71	shaped core		1	-	-	-	-	-	-	Bailey Chert
11AX602	71	shatter		3	-	-	-	-	-	-	
11AX602	71	spokeshave	crude	1	-	-	-	-	-	-	Bailey Chert?
11AX602	71	stoneware, buff paste	unid. slip	2	-	-	-	-	-	-	
11AX602	71	stoneware, gray paste	unid. slip	1	-	-	-	-	-	-	
11AX602	71	tertiary biface fragment		5	-	-	-	-	-	-	undifferentiated St. Louis Chert (1); Bailey Chert (2); Mill Creek Chert (1); Kaolin Chert (1)
11AX602	71	tertiary flake		11	-	4	5	2	-	-	
11AX602	71	untyped biface fragment		1	-	-	-	-	-	-	Kornthal Chert (1)
11AX602	71	untyped scraper	fragment	3	-	-	-	-	-	-	Cobden/Dongola Chert (1); Kornthall Chert (1); Other Chert (1)
11AX602	71	utilized flake		18	-	-	-	-	-	-	
11AX602	71	utyped scraper		2	-	-	-	-	-	-	Cobden/Dongola Chert (1); Other Chert (1); Kornthal Chert (1); Bailey Chert (1)
11AX602	71	whiteware, plain		1	-	-	-	-	-	-	
			11AX602 Total=	***111***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX603	72	container glass, bead neck finish	amethyst	1	-	-	-	-	-	-	
11AX603	72	flake fragment		12	-	-	-	-	-	-	
11AX603	72	hammerstone fragment		1	-	-	-	-	-	-	orthoquartzite
11AX603	72	steep edged scraper	unique, core trimming flake made into unhaftable endscraper-like tool	1	-	-	-	-	-	-	undifferntiated St. Louis chert
11AX603	72	tertiary biface fragment		1	-	-	-	-	-	-	undifferentaiated Mississippian-aged chert
11AX603	72	tertiary flake		3	-	1	2	-	-	-	

11AX603	72	untyped scraper		1	-	-	-	-	-	-	Bailey Chert
11AX603	72	utilized flake		3	-	-	-	-	-	-	
			11AX603 Total=	***23***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX604	78	flake fragment		1	-	-	-	-	-	-	
11AX604	78	tertiary flake		1	-	-	-	-	-	-	
11AX604	78	untyped scraper		1	-	-	-	-	-	-	
			11AX604 Total=	***3***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX605	79	flake fragment		6	-	-	-	-	-	-	
11AX605	79	secondary flake		1	-	-	-	1	-	-	
11AX605	79	tertiary flake		2	-	1	1	-	-	-	
11AX605	79	untyped scraper		1	-	-	-	-	-	-	Kornthal Chert
			11AX605 Total=	***10***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX606	80	secondary biface fragment	possible adze bit	1	-	-	-	-	-	-	Other Chert
			11AX606 Total=	***1***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**≥5**	**Raw Material**
11AX607	81	canning seal lid fragment		1	-	-	-	-	-	-	
11AX607	81	ceramic doorknob		1	-	-	-	-	-	-	
11AX607	81	container glass	amethyst	3	-	-	-	-	-	-	
11AX607	81	container glass	clear	2	-	-	-	-	-	-	
11AX607	81	flat glass	clear	1	-	-	-	-	-	-	
11AX607	81	stoneware, buff paste	unid. slip	1	-	-	-	-	-	-	
11AX607	81	stoneware, gray paste	unid. slip	7	-	-	-	-	-	-	
11AX607	81	whiteware, decorated	unid. blue glaze, burned	1	-	-	-	-	-	-	
11AX607	81	whiteware, plain	crazed	1	-	-	-	-	-	-	
			11AX607 Total=	***18***							
					Size Grade						

Trinomial	FN	Artifact Category	Comments	n=	1	2	3	4	5	>5	Raw Material
11AX608	82	bifacial thinning flake		1	-	-	-	-	-	-	
11AX608	82	flake fragment		30	-	-	-	-	-	-	
11AX608	82	pp/k fragment, Chesser Notched-like (possibly reutilized as hafted scraper)		1	-	-	-	-	-	-	Undifferentiated Mississippian-aged Chert (1)
11AX608	82	primary biface fragment		3	-	-	-	-	-	-	Mill Creek Chert (1); Clear Creek Chert? (1); Other Chert (1)
11AX608	82	primary flake		1	-	-	1		-	-	
11AX608	82	secondary flake		2	-	-	-	1	-	-	
11AX608	82	spokeshave	all very crude	3	-	-	-	-	-	-	Mounds Gravel (1); Other Chert (2)
11AX608	82	tertiary biface fragment	possible pp/k distal	1	-	-	-	-	-	-	Other Chert
11AX608	82	tertiary flake		6	-	1	3	2	-	-	
11AX608	82	untyped scraper		6	-	-	-	-	-	-	Mounds Gravel (1); Kornthall Chert (1); Other Chert (2)
			11AX608 Total=	***54***							
					Size Grade						
Trinomial	**FN**	**Artifact Category**	**Comments**	**n=**	**1**	**2**	**3**	**4**	**5**	**>5**	**Raw Material**
FN02	2	amorphous core	utilized	1	-	-	-	-	-	-	Kornthal Chert?
FN02	2	blade flake	utilized	2	-	-	-	-	-	-	
FN02	2	drill		1	-	-	-	-	-	-	Cobden/Dongola Chert
FN02	2	flake fragment	thermally altered=1	55	-	-	-	-	-	-	
FN02	2	pp/k fragment, untyped expanding (rounded) stemmed		1	-	-	-	-	-	-	Other Chert
FN02	2	pp/k fragment, uptyped expanding stemmed?		1	-	-	-	-	-	-	Other Chert
FN02	2	pp/k, untyped straight to slightly contracting stemmed		1	-	-	-	-	-	-	Mounds Gravel
FN02	2	primary biface fragment		5	-	-	-	-	-	-	Kornthal Chert (3); Other Chert (2)
FN02	2	secondary biface		1	-	-	-	-	-	-	Other Chert
FN02	2	secondary biface fragment		3	-	-	-	-	-	-	Cobden/Dongola Chert (1); Bailey Chert (1); Other Chert (1)
FN02	2	secondary flake		3	-	-	-	2	1	-	
FN02	2	steep edged scraper	manufactured on split cobble	1	-	-	-	-	-	-	Bailey Chert
FN02	2	tertiary biface		2	-	-	-	-	-	-	Kornthal Chert (1); Other Chert (1)
FN02	2	tertiary biface fragment	probably pp/k medial	1	-	-	-	-	-	-	Other Chert
FN02	2	tertiary biface fragment	probably pp/k distals	2	-	-	-	-	-	-	Other Chert
FN02	2	tertiary biface fragment		2	-	-	-	-	-	-	Elco Chert (1); Other Chert (1)
FN02	2	tertiary flake	thermally altered=2	15	-	2	3	8	1	1	

FN02	2	unifacial scraper		6	-	-	-	-	-	-	Other Chert (6)
FN02	2	utilized flake		2	-	-	-	-	-	-	
			FN02 Total=	***105***							

APPENDIX C
SITE FORMS

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** McCarthy **Revisit:** Y
Field Number: 43 **State Site No.:** 100
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NENWNE	NWNWNE	SWNWNE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align		**1/4s:**			**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**			**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**			**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106640 **UTM East:** 292744 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a young winter wheat field. Wheat overplanted on last year's corn stubble. Site occupies the north face of a low ridge trending generally from southwest to northeast.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 16837
Ground Cover (List up to 3): No Till **Visibility (%):** 50
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 4 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: distal pp/k fragment (1); biface (1); secondary flake (1); teritary flake (1)

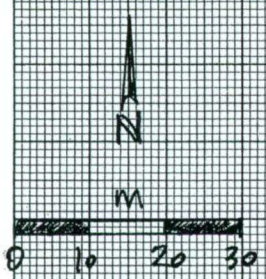
TEMPORAL AFFILIATION (check all that apply)

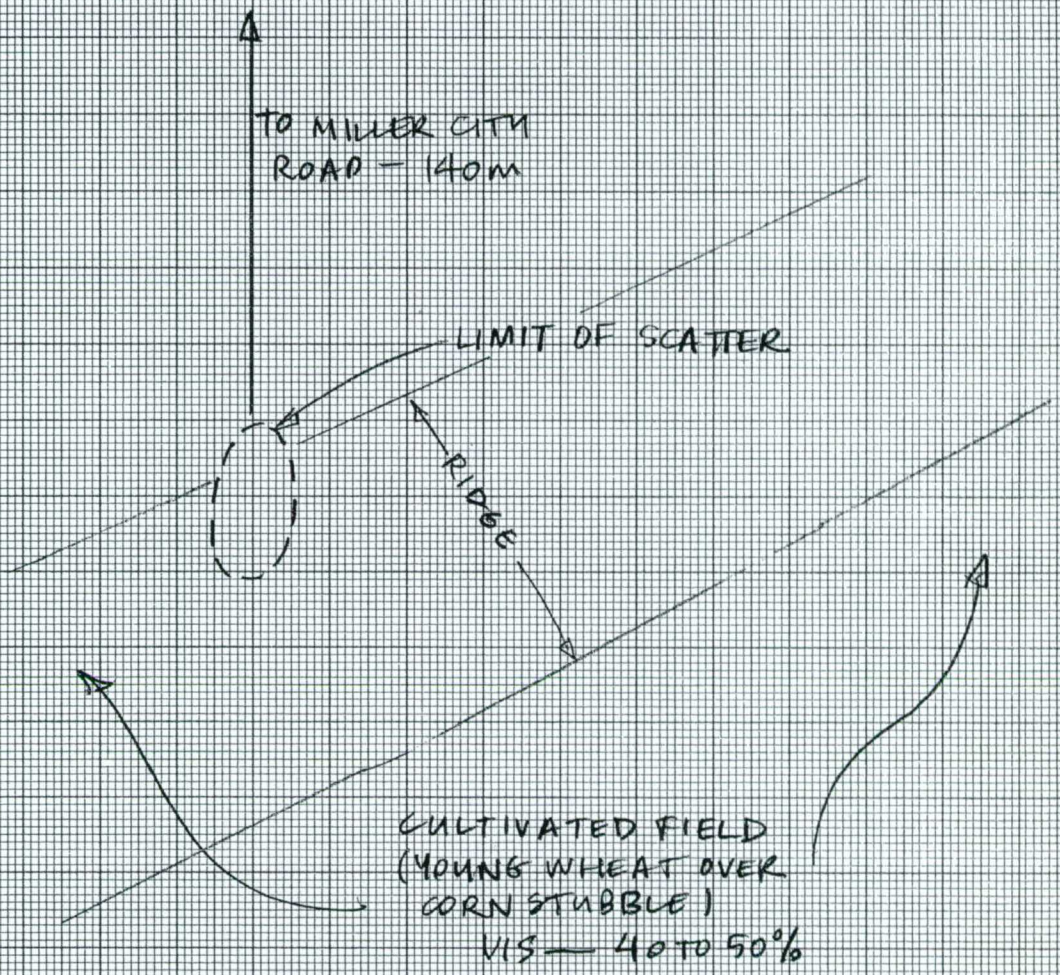
Prehistoric Unknown:	**Late Archaic:** Y	**Mississippian:** Y	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:** Y	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/05/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

LEN SMALL SURVEY
FIELD NO. 43
05 APRIL 04
ALBERTSON





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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** Y
Field Number: 83 **State Site No.:** 341
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	NE	**1/4s:**	SENENW	NESENW	NWSENW	SWNENW	**Section:** 26	**Township:** 16 S	**Range:** 2
Align		**1/4s:**					**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**					**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**					**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4107893 **UTM East:** 295567 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a cultivated field, recently tilled prior to survey. It lies along a low ridge with a distinct swale to the west. It is a short distance north of Grand Lake.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 10408
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

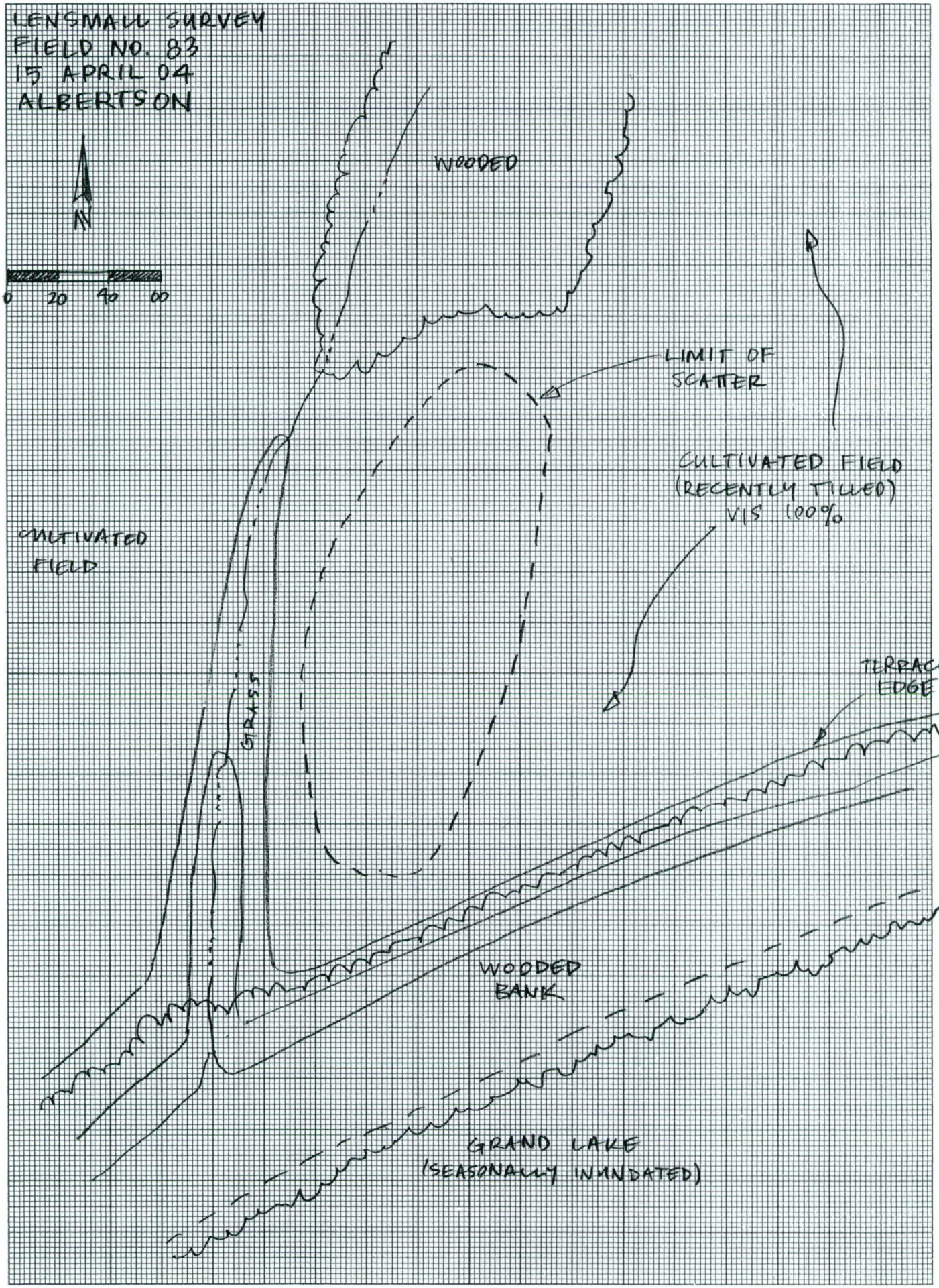
Number of Prehistoric Artifacts (count or estimate): 53 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k (1); pp/k frag. (1); possible adze (1); biface fragment (6); utilized flake (2); untyped scraper (7); core (2); hammerstone (1); bifacial thinning flake (1); core trimming flake (3); tertiary flake (7); broken flake (8); flake fragment (12); FCR (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:** Y	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:** Y	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Both pp/ks recovered are untyuped. One closely resembles a variety of Late Archaic forms. The other exhibits a large, broad, expanding stem and likely dates to the Middle Woodland Period.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/15/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/15/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** Y
Field Number: 19 **State Site No.:** 361
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWSWSW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105216 **UTM East:** 293347 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site occupies a broad, generally level section of Mississippi River floodplain. It lies in a rocky cultivated field, recently tilled prior to survey. Is a short distance northeast of the intersection of Schendler Cemetery and an unnamed road.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 6008
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

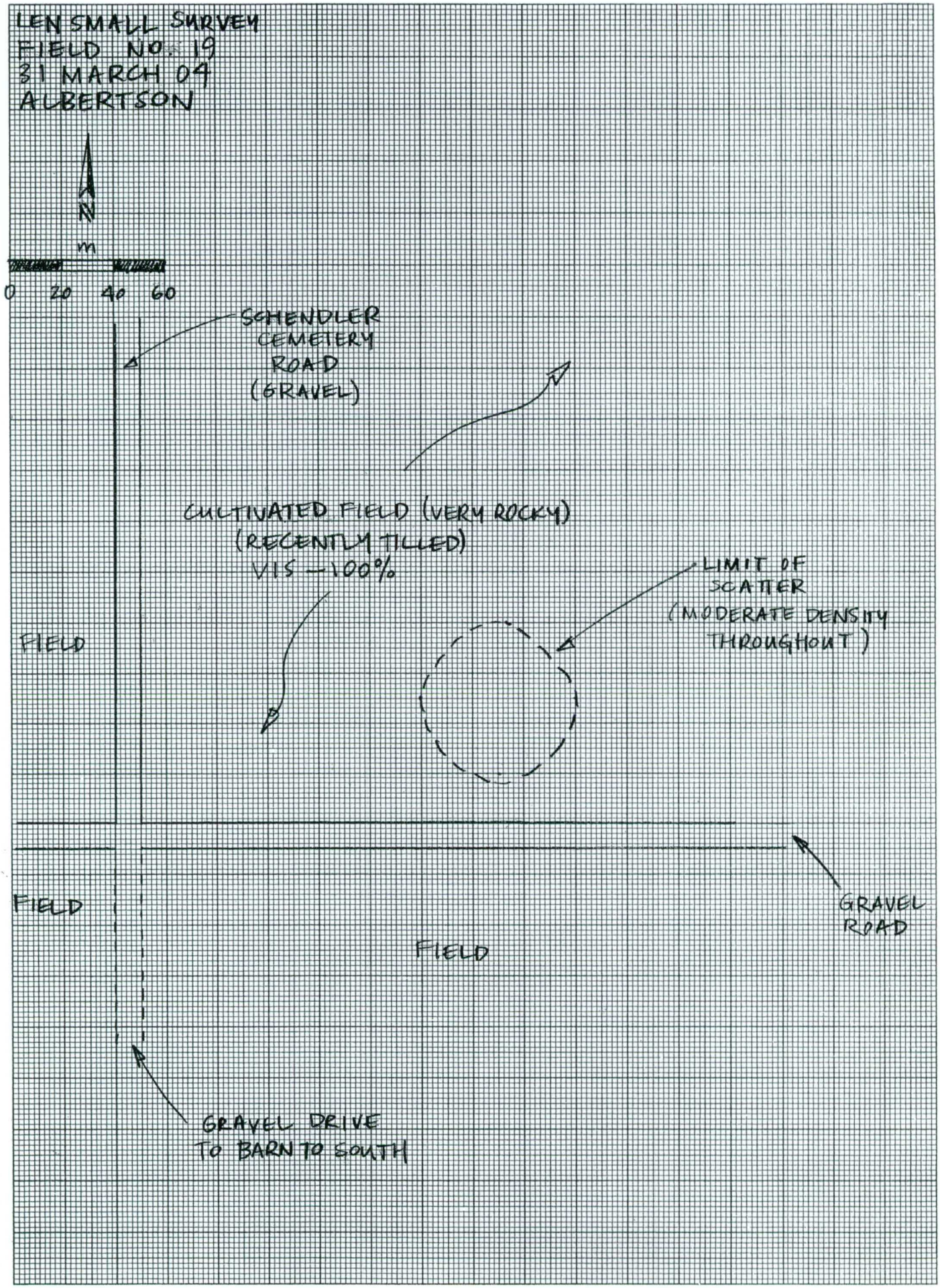
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 43
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface (1); brick fragment (1); stoneware (13); whiteware (11); refined earthenware (1); container glass (16); metal hook (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: Prehistoric assemblage was non-diagnostic. Historic temporal affiliation based on the occurrence of amethyst glass and an identified backmark on one of the whiteware specimens.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: Y
Field Number: 08
State Site No.: 368
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NENESE	NWNESE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105835 **UTM East:** 293035 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 99
Nearest Water Supply: Lake Milligan
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site located along the south side of a low ridge. A swale is is located to the south of the ridge. Field containing the site planted in young winter wheat.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 14900
Ground Cover (List up to 3): Cultivated
Visibility (%): 50
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

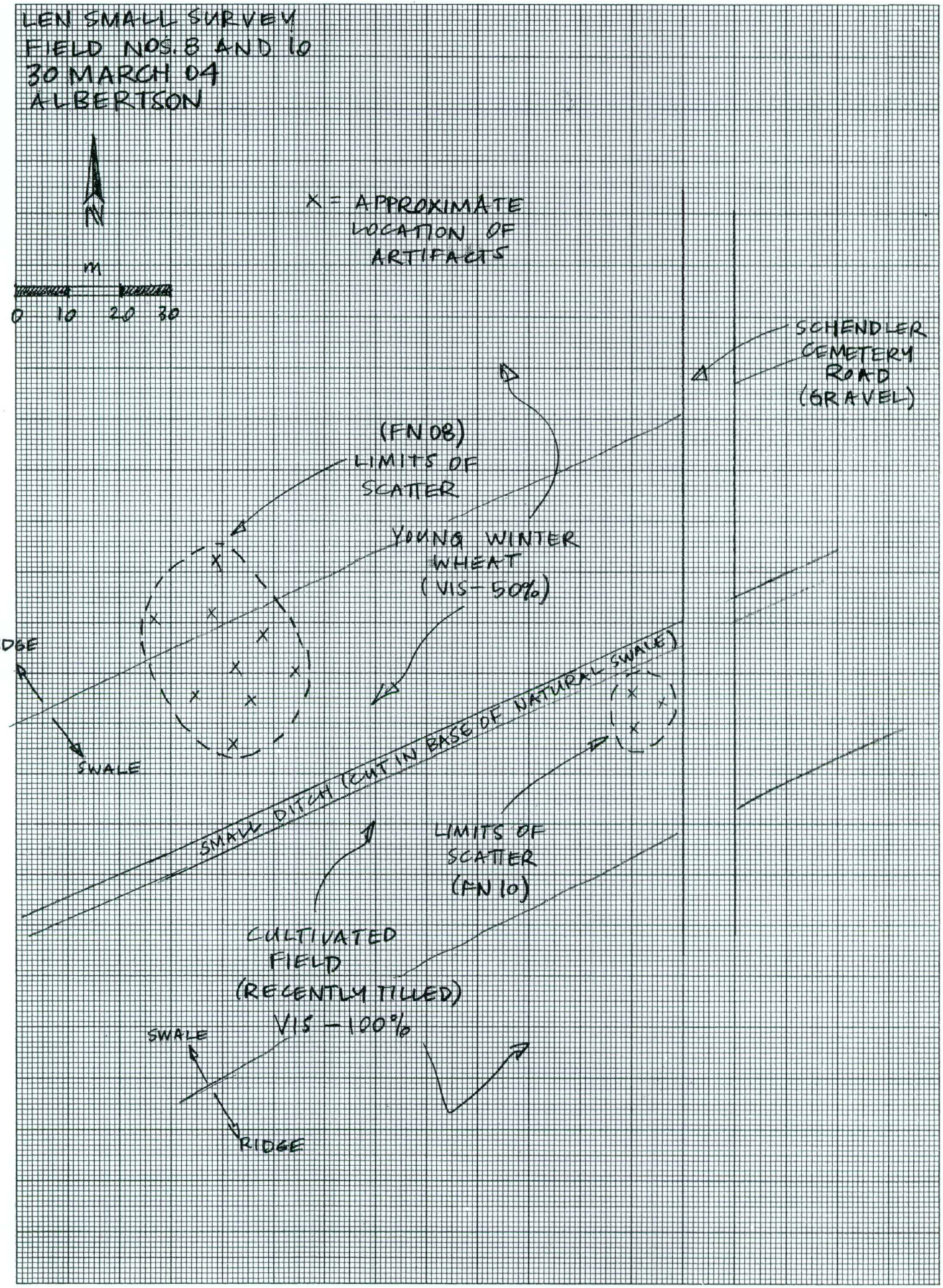
Number of Prehistoric Artifacts (count or estimate): 8
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: biface fragment (1); spokeshave (1); utilized flake (1); secondary flake (1); tertiary flake (2); flake fragment (2)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:** Y	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: recovered assemblage was non-diagnostic

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** Y
Field Number: 03 **State Site No.:** 375
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NWSWNW	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106395 **UTM East:** 291750 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed Lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Site is located along a low ridge trending from the NW-SE. Lies in a cultivated field, recently tilled prior to survey. A small ditch flows southwest of the site. A pit blind (for goose hunting) is found approximately 15 m southeast of the site.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 11250
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

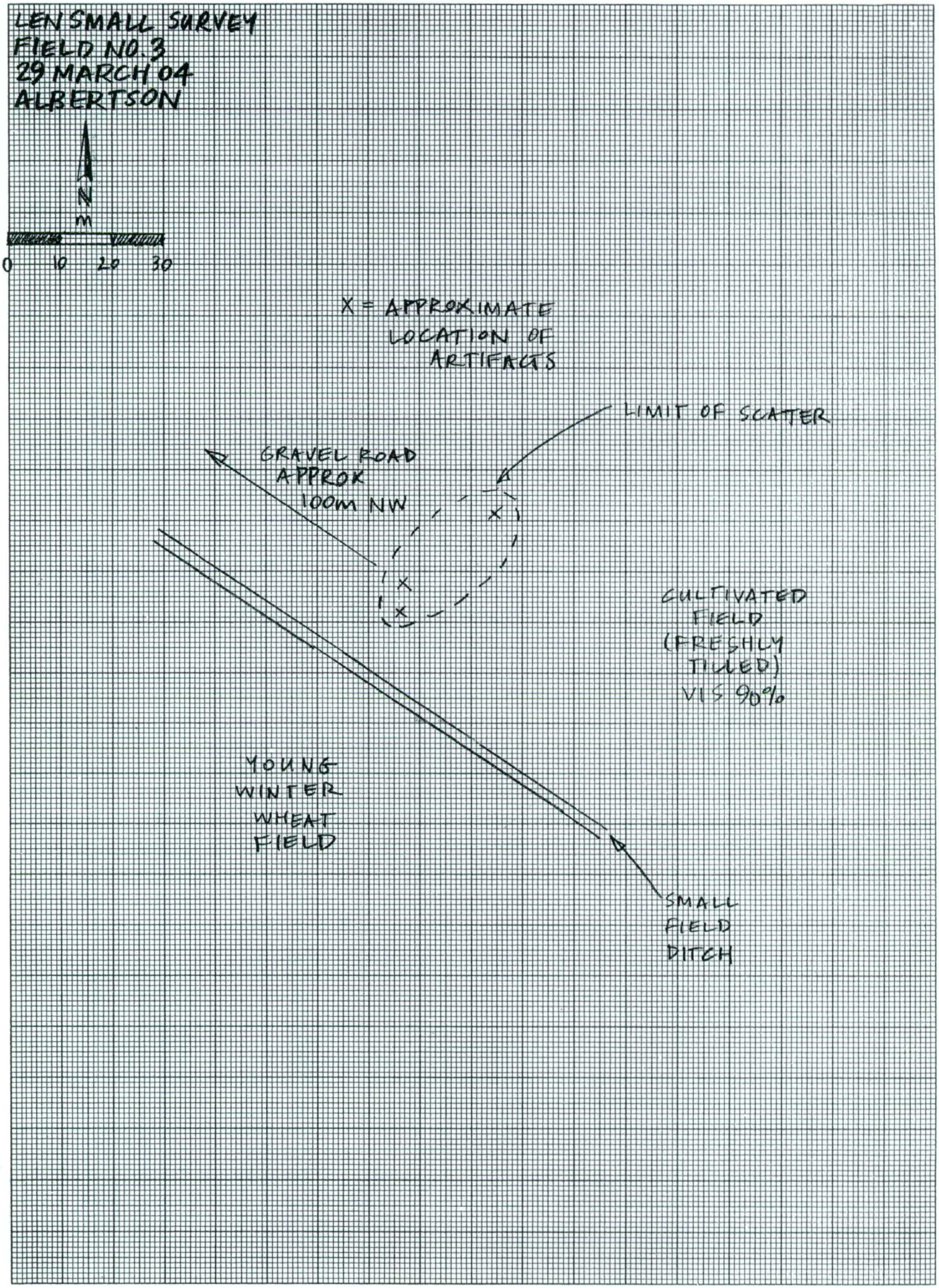
Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface fragment (1); untyped scraper (1); secondary flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:** Y	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):** Y
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/29/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: Y
Field Number: 04
State Site No.: 376
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:**	SWNWNW	**Section:**	33	**Township:**	16 S	**Range:** 2
Align		**1/4s:**		**Section:**	0	**Township:**	0	**Range:** 0
Align		**1/4s:**		**Section:**	0	**Township:**	0	**Range:** 0
Align		**1/4s:**		**Section:**	0	**Township:**	0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106536 **UTM East:** 291756 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 99
Nearest Water Supply: Unnamed Lake
Drainage: Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Find lies in a broad, generally level section of Mississippi River floodplain. Occupies a rocky cultivated field, recently tilled prior to survey. Is southeast of an unnamed gravel (to the west) and a dirt field road (to the north).

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 9036
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

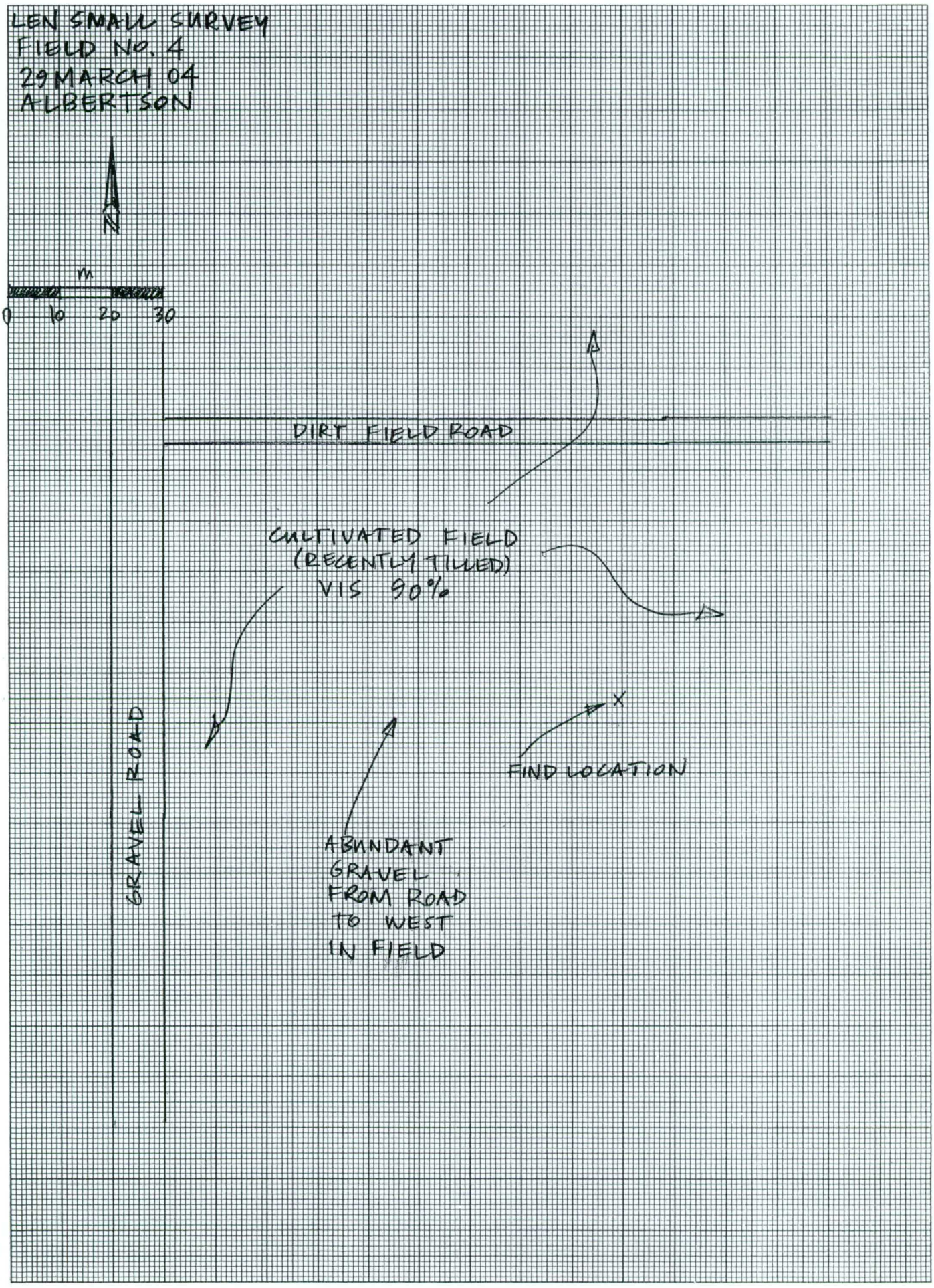
Number of Prehistoric Artifacts (count or estimate): 1
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: untyped scraper (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:** Y	**Mississippian:** Y	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:** Y	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The item recovered at this location was non-diagnostic.

Surveyor: E. Albertson
Institution: PCI
Survey Date: 03/29/2004
Curation Facility: ISM
Site Report by: E. Albertson
Institution: PCI
Date: 07/13/2004
IHPA Log No.:
IHPA First Sur. Doc. No.:
Compliance Status:
NRHP Listing: N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** Y
Field Number: 18 **State Site No.:** 412
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWSESE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105228 **UTM East:** 292989 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site occupies a broad, generally level section of Mississippi River floodplain. Lies in a cultivated field, recently tilled prior to survey. Is west of the intersection of Schendler Cemetery and another, unnamed road.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 4816
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

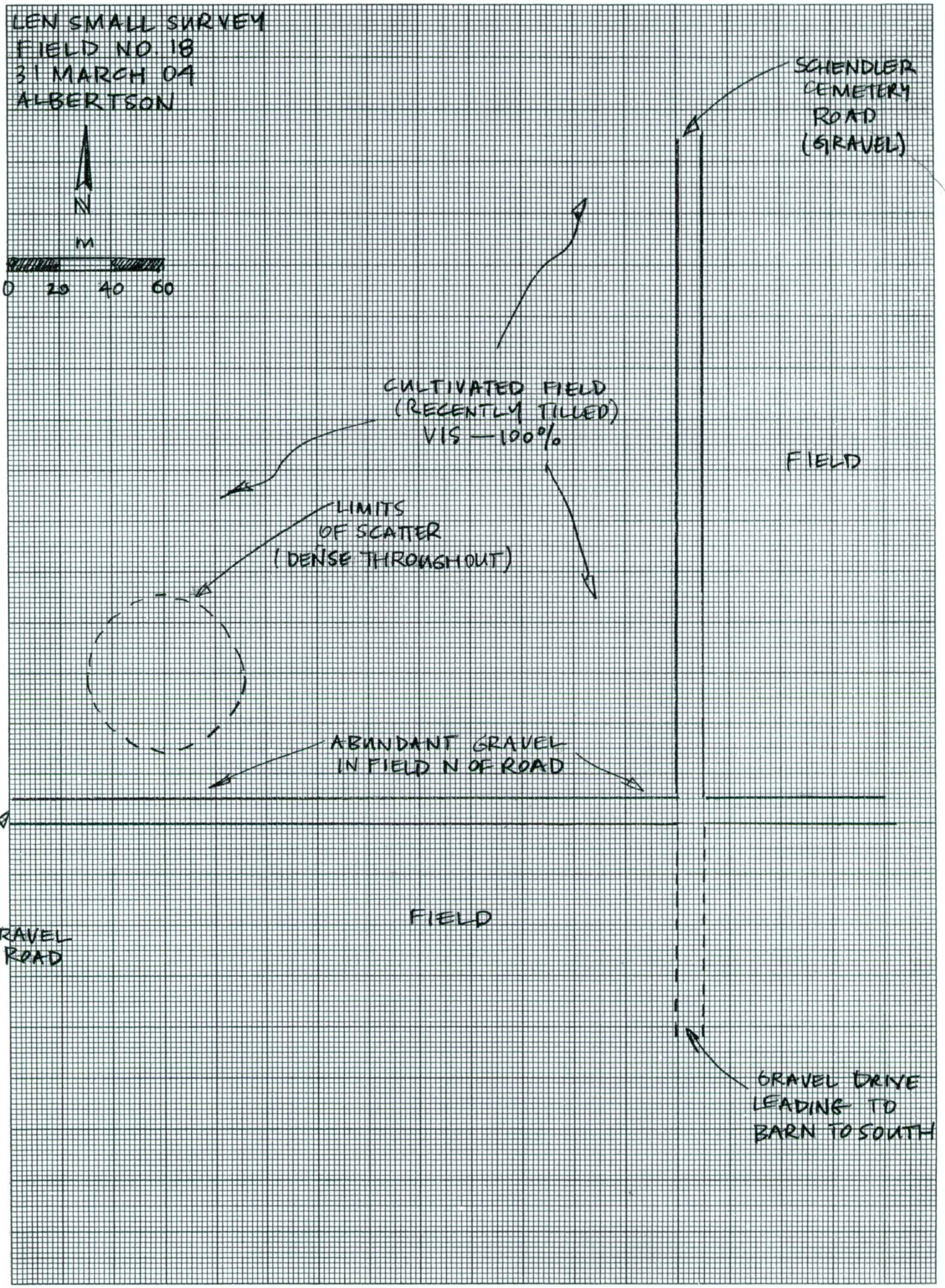
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 96
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: flake frag (1); brick frag (1); padlock (1); spoon (1); battery core (1); saddle horn (1); hinge (1); stoneware (29); whiteware (19); ironstone (2); porcelain (2); cc-ware (1); container glass (27); milk glass (6); flat glass (1); unid metal (3)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: Prehistoric artifact assemblage was non-diagnostic. Historic temporal affilliation based on recovery of several pieces of amethyst glass and ceramics including several decorated with transfer prints and one back mark from the late nineteenth century.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 01 **State Site No.:** 562
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NWSWNW	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106212 **UTM East:** 291721 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Site lies in a broad, generally level section of Missississpi floodplain. Occupied a young winter wheat at the time of survey. Is approximately 200 m north of a metal shed (owned by C. Bonnefield) along the east side of an unnamed gravel road.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 949
Ground Cover (List up to 3): Cultivated **Visibility (%):** 60
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k (1); flake fragment (1)

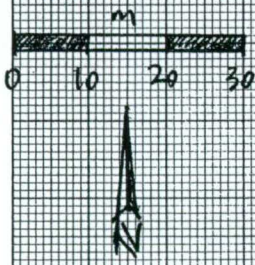
TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:** Y	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:** Y	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Recovered PP/K was non-diagnostic but resembles a number of Late Woodland-Mississippian forms.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/29/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

LEN SMALL SURVEY
FIELD NO. 1
29 MARCH 04
ALBERTSON
X = APPROX ARTIFACT LOCATION



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 05 **State Site No.:** 563
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NENWSW	**Section:** 33	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105962 **UTM East:** 292029 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed Lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field planted in young winter wheat at the time of survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1038
Ground Cover (List up to 3): Cultivated **Visibility (%):** 50
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

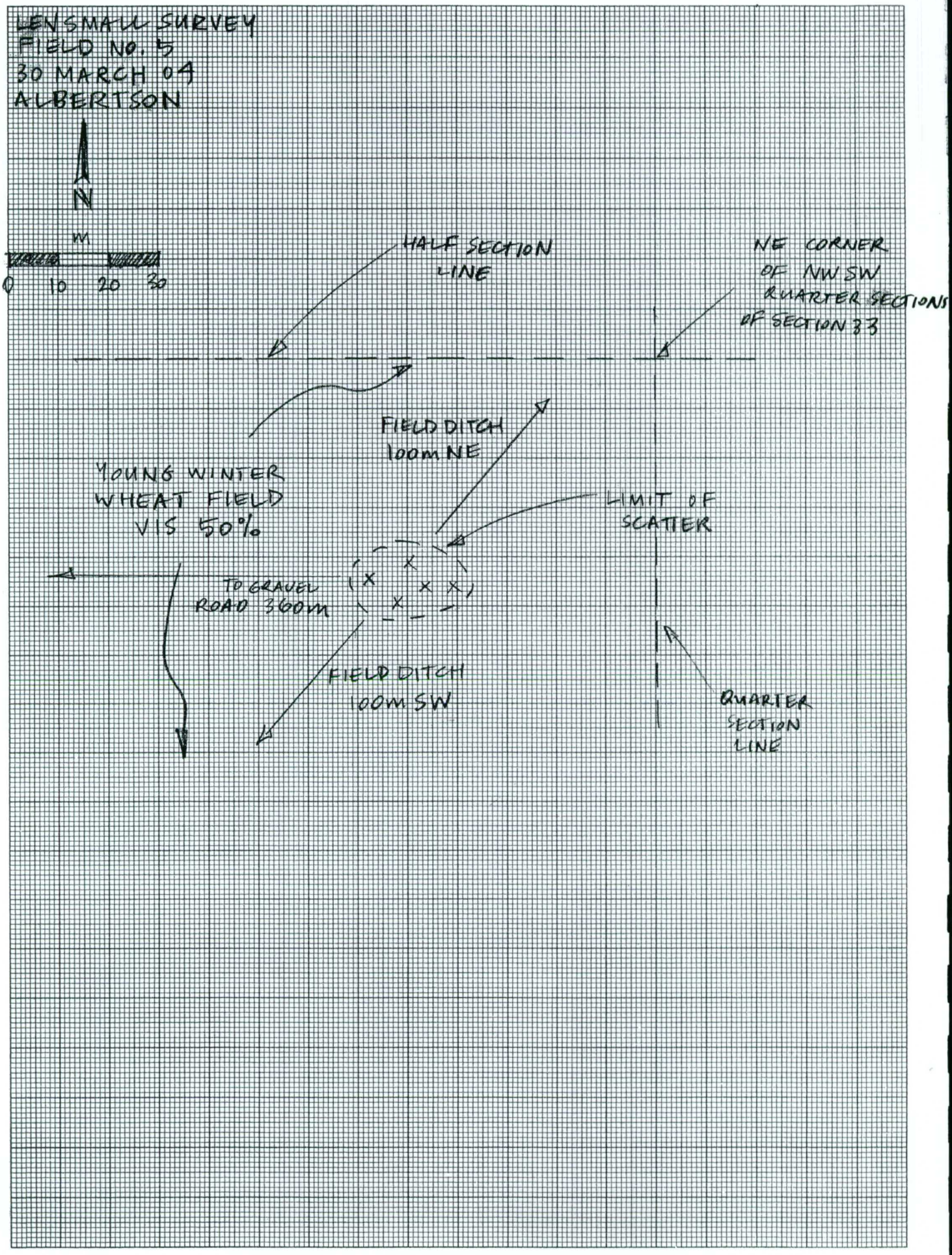
Number of Prehistoric Artifacts (count or estimate): 4 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: clay tempered sherd (1); adze (2); core fragment (1); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:** Y	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The sherd recovered was clay-tempered indicating a Woodland temporal affiliation.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 06 **State Site No.:** 564
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWNWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105780 **UTM East:** 292507 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field planted in young winter wheat. Lies along a field break immediately to the east.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 954
Ground Cover (List up to 3): Cultivated **Visibility (%):** 50
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

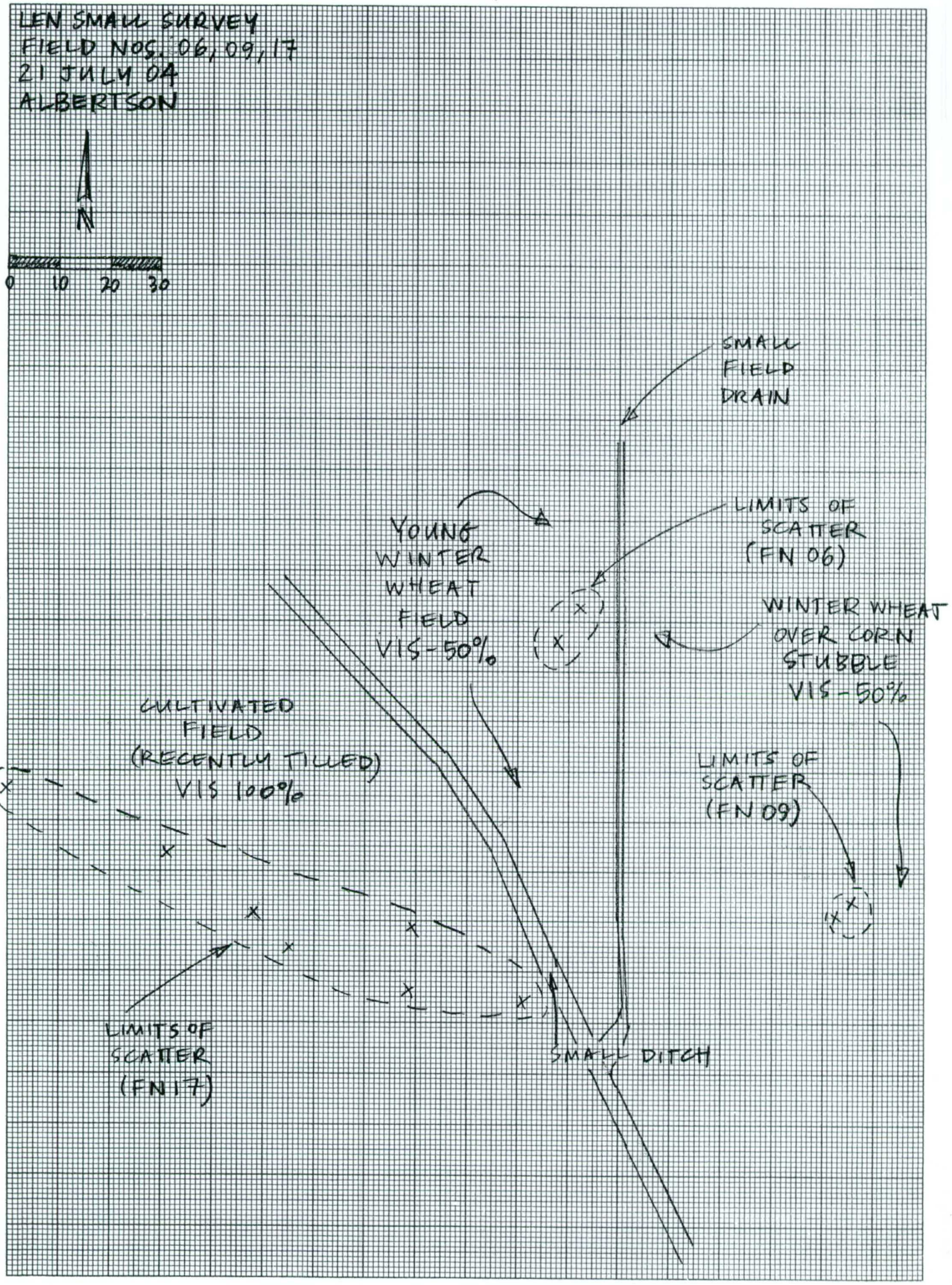
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: flake fragment (2)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifacts were non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 07 **State Site No.:** 565
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NWNWSW	**Section:** 33	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105792 **UTM East:** 291816 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Site occupies the north side of a sand ridge in a broad area of Mississippi River floodplain. Ground cover in the site area consists of bean stubble.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 989
Ground Cover (List up to 3): Cultivated Stubble **Visibility (%):** 50
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: utilized flake (1); blade flake (1); tertiary flake (1)

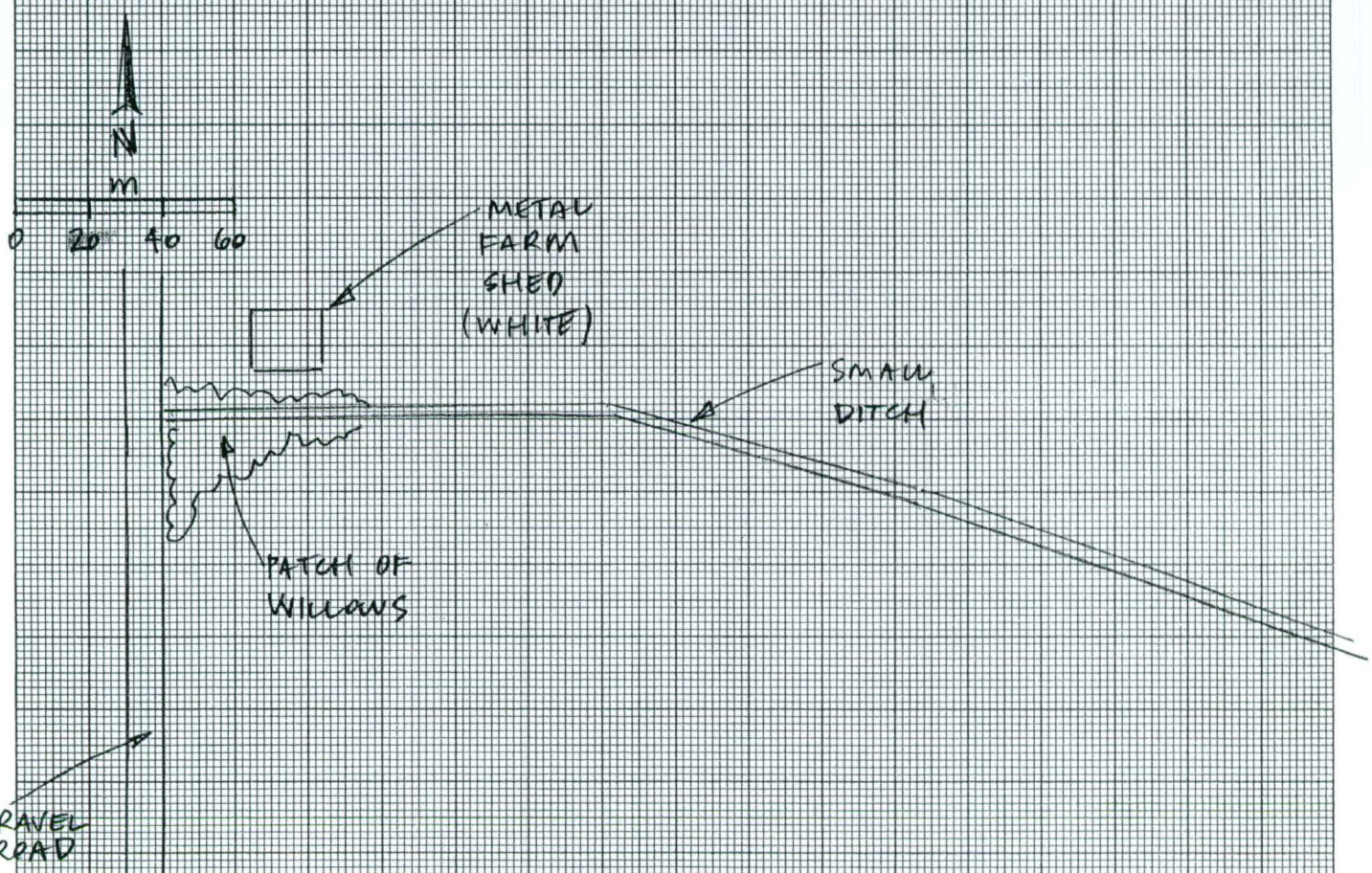
TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

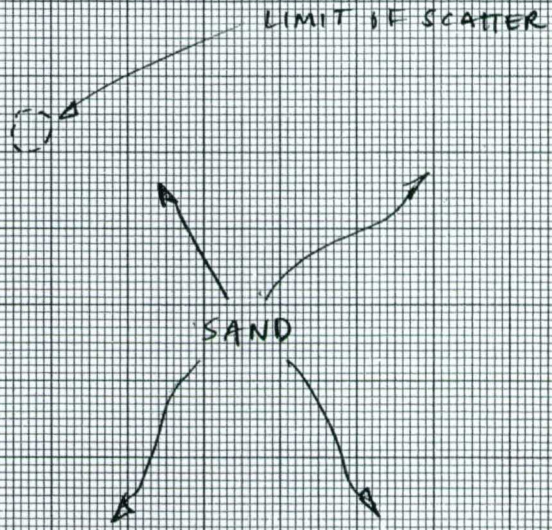
Description: recovered assembalge non-diagnostic

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

LEN SMALL SURVEY
FIELD NO. 7 (REVISED)
30 MARCH 04
ALBERTSON



BEAN STUBBLE
VIS – 50%



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 09 **State Site No.:** 566
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWNWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105748 **UTM East:** 292545 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site occupies a broad, generally level section of the Mississippi River floodplain. A small ditch is located west of the site. The field containing the site planted in young winter wheat over some corn stubble from previous year.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 740
Ground Cover (List up to 3): Cultivated Stubble **Visibility (%):** 50
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Other

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

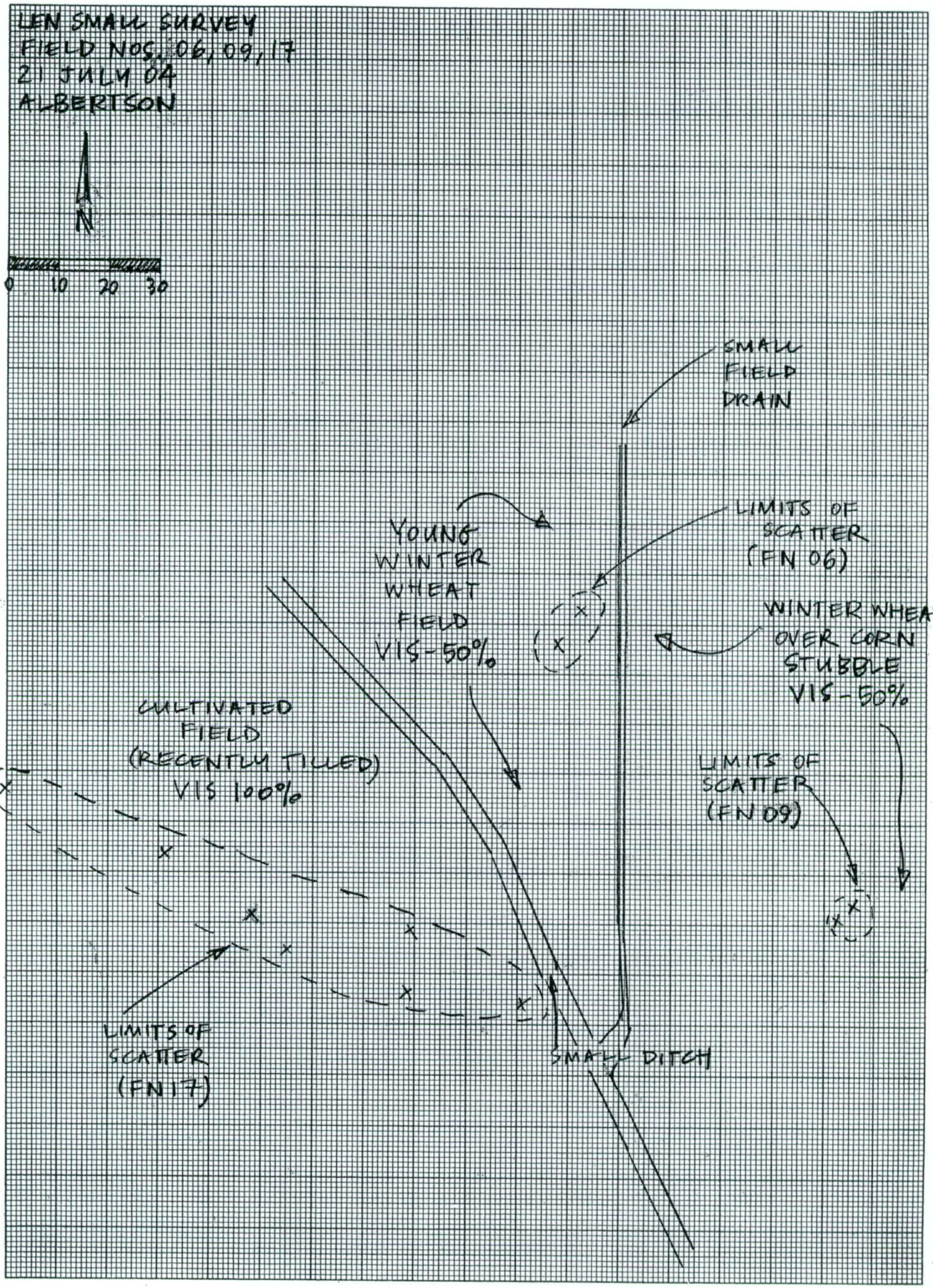
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: secondary flake (1); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: recovered artifact assemblage was non-diagnostic

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.
K+E

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 10 **State Site No.:** 567
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENESE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105847 **UTM East:** 293264 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site occupies the slope between a ridge to the south and a swale to the north. Lies in a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 134
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Other

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

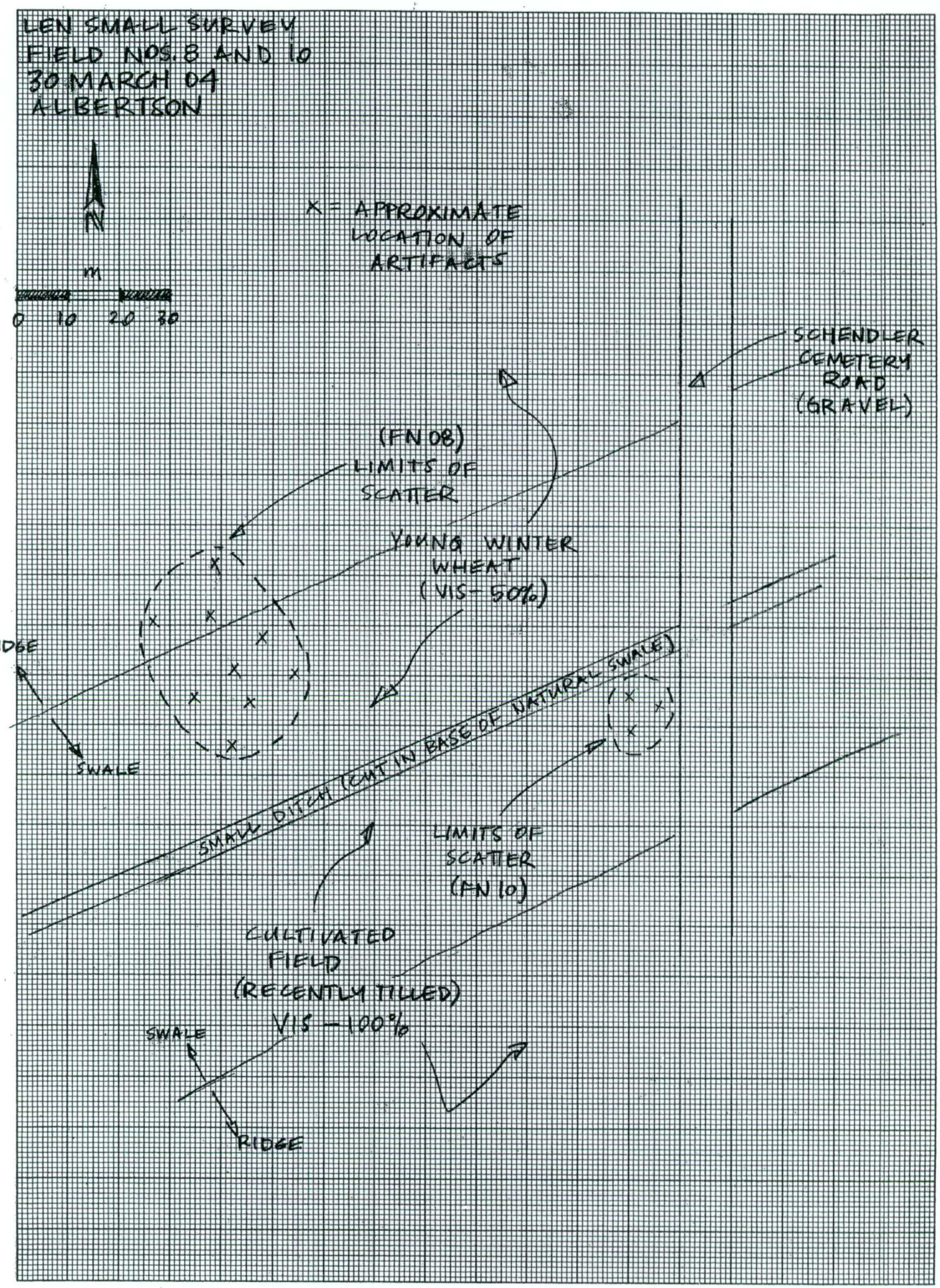
Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface (1); tertiary flake (1); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: recovered artifact assemblage was non-diagnostic

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 11 **State Site No.:** 568
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105663 **UTM East:** 292852 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies along a low natural levee south of a former tributary of Grand Lake. The tributary is presently channelized as a field ditch. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

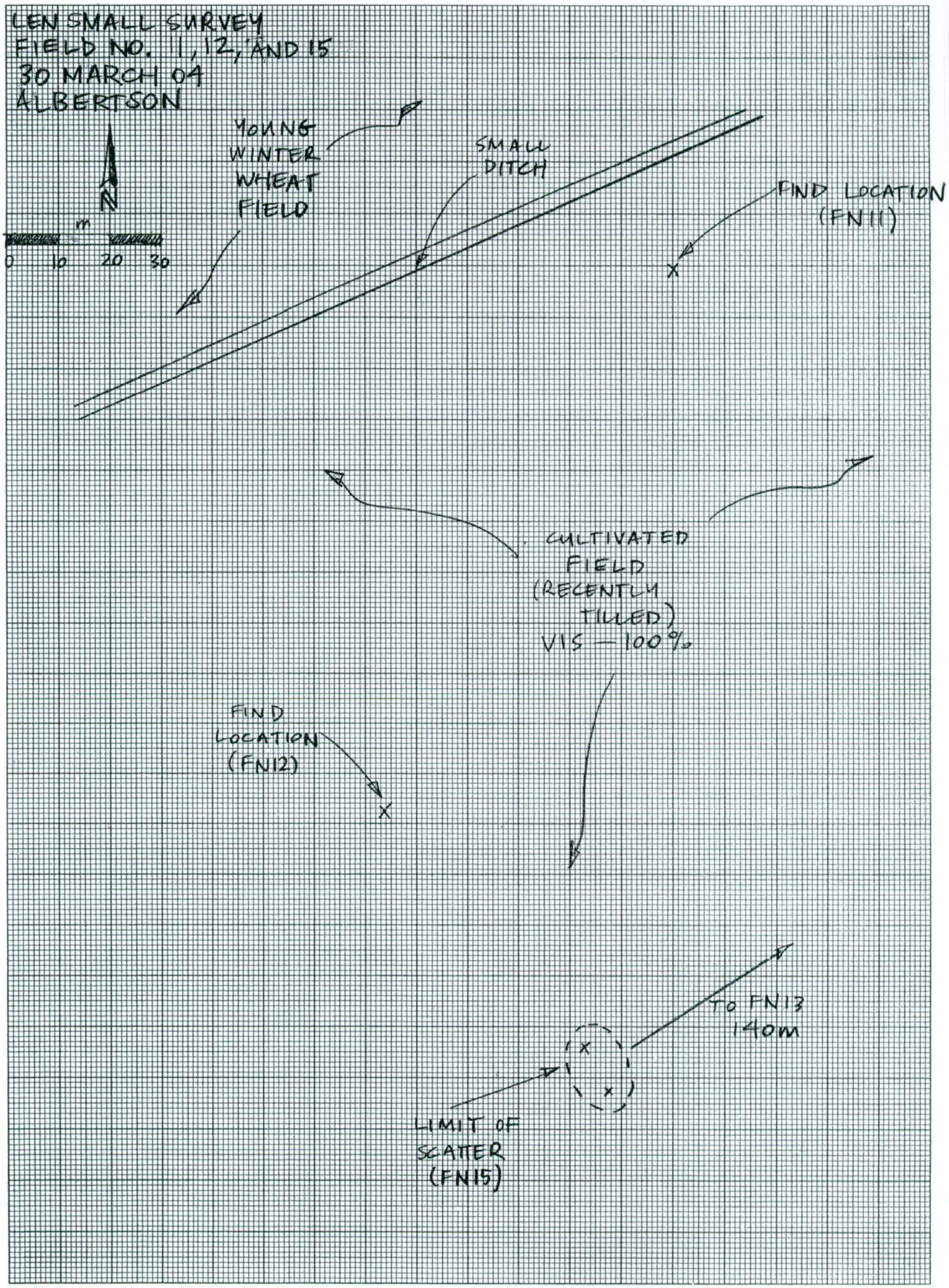
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: recovered artifact assemblage non-diagnostic

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 12 **State Site No.:** 569
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105529 **UTM East:** 292785 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Isolated find lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

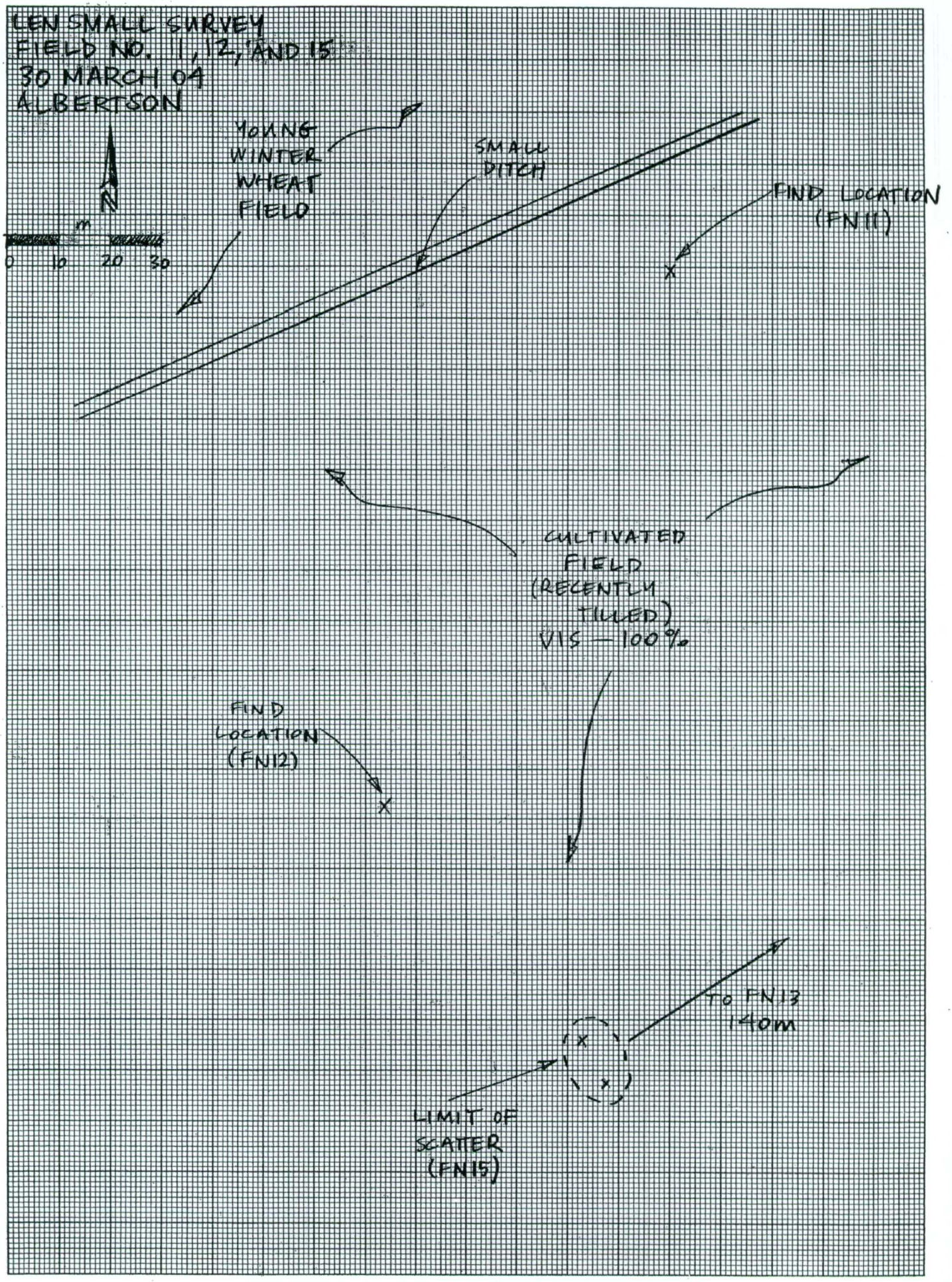
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: recovered artifact assemblage was non-diagnostic

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 13 **State Site No.:** 570
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NWSESE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105541 **UTM East:** 292944 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 854
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Other

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

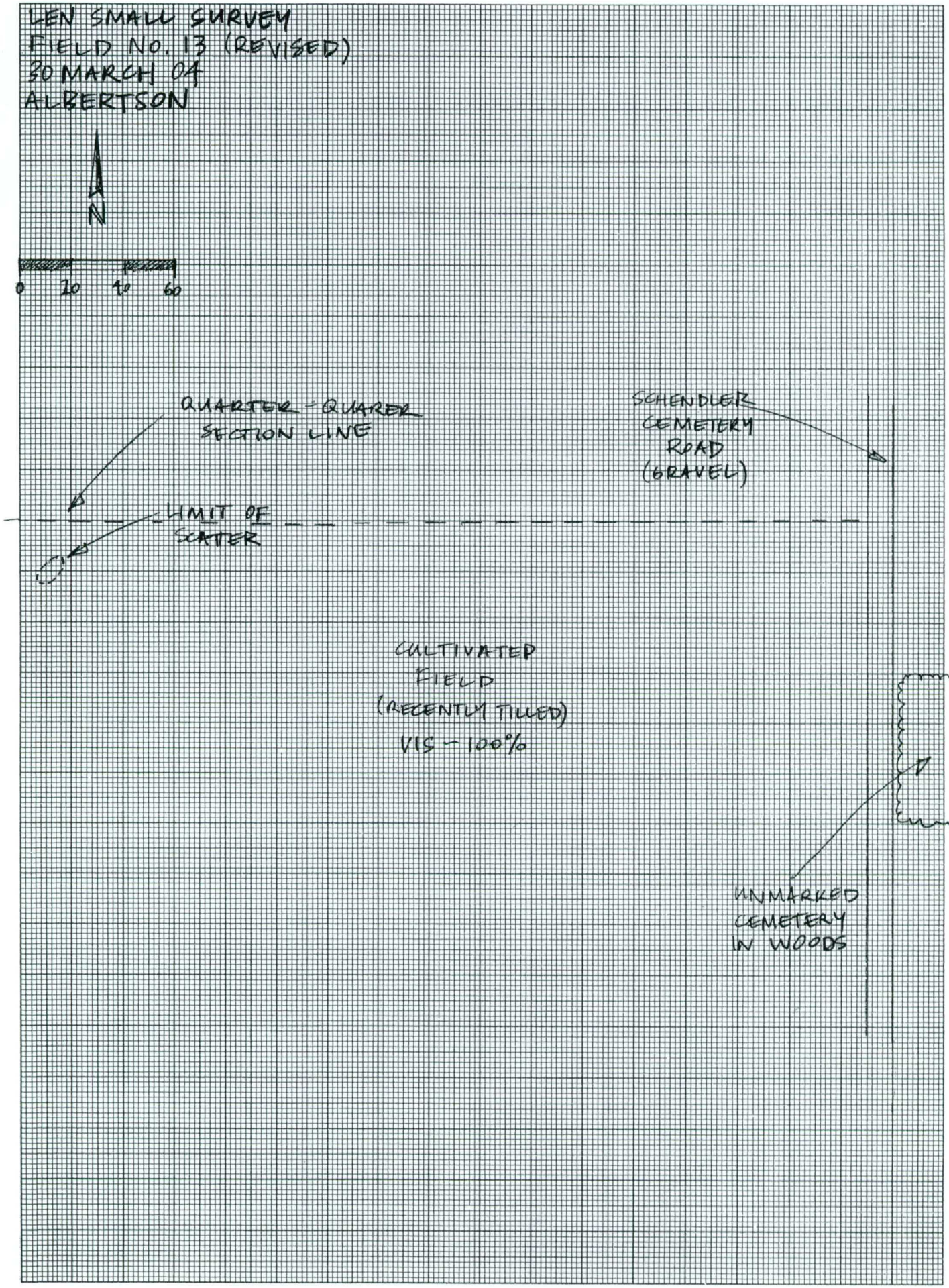
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface (1); primary flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/30/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 14 **State Site No.:** 571
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NESESE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105480 **UTM East:** 293250 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Isolated find that lies in a broad, generally level section of Mississippi River floodplain. Occcupies a cultivated field, recently tilled prior to survey. Can be found along the west side of Schendler Cemetery Road across from an abandoned cemetery.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

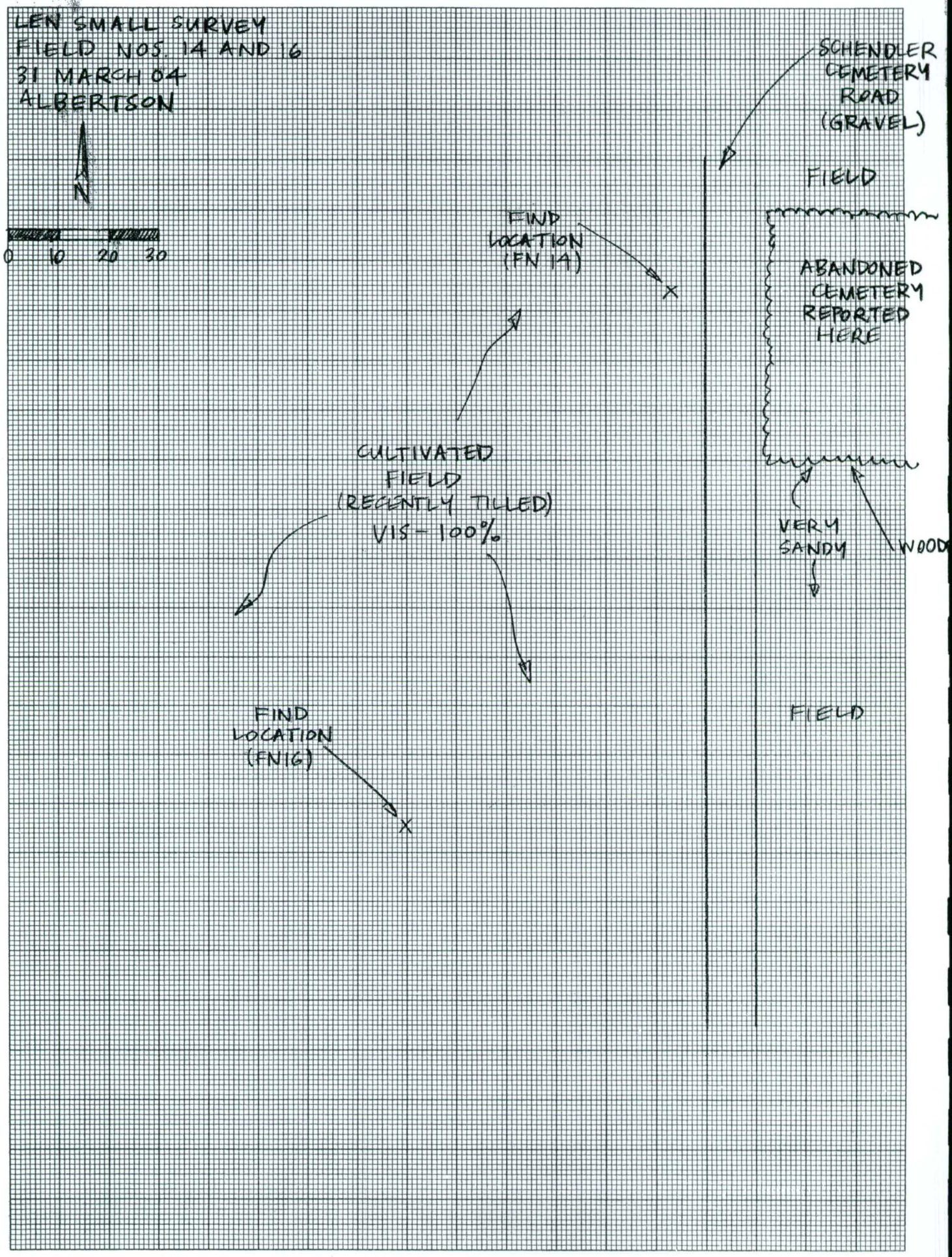
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: secondary flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
K&E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 15 **State Site No.:** 572
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105476 **UTM East:** 292818 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 817
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Other

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

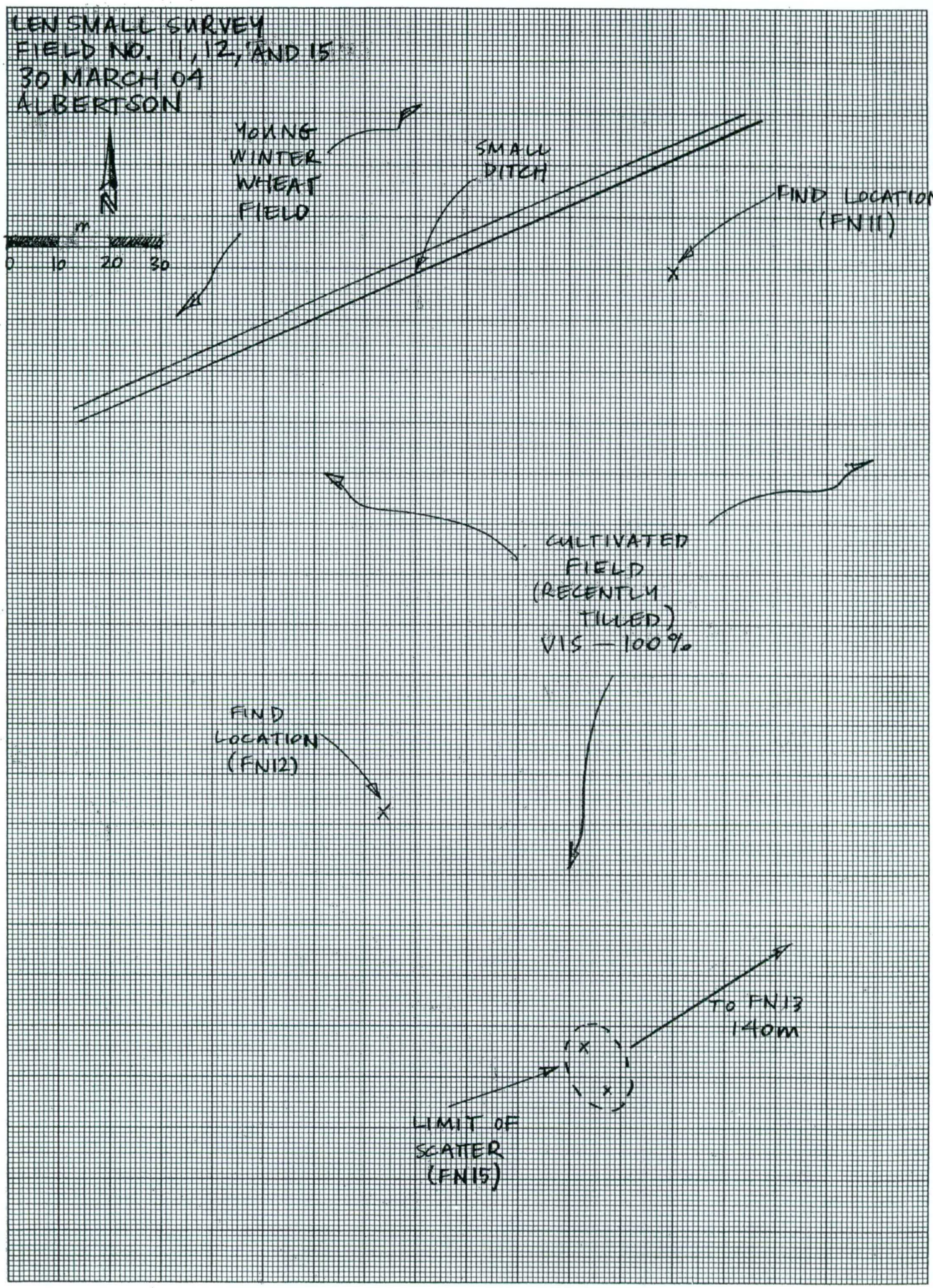
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: tertiary flake (1); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 16 **State Site No.:** 573
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NESESE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105368 **UTM East:** 293194 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

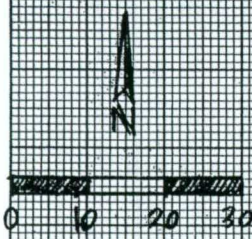
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: spokeshave (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
Description:			**Post-War (1946-present):**

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/13/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

LEN SMALL SURVEY
FIELD NOS. 14 AND 16
31 MARCH 04
ALBERTSON



SCHENDLER CEMETERY ROAD (GRAVEL)

FIELD

FIND LOCATION (FN 14)

ABANDONED CEMETERY REPORTED HERE

CULTIVATED FIELD (RECENTLY TILLED) VIS - 100%

VERY SANDY

WOOD

FIND LOCATION (FN 16)

FIELD

46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 17 **State Site No.:** 574
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENESW	SWNWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105719 **UTM East:** 292467 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies along a low natural levee along a former tributary of Grand Lake. Tributary is now channelized as a field ditch. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 3506
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

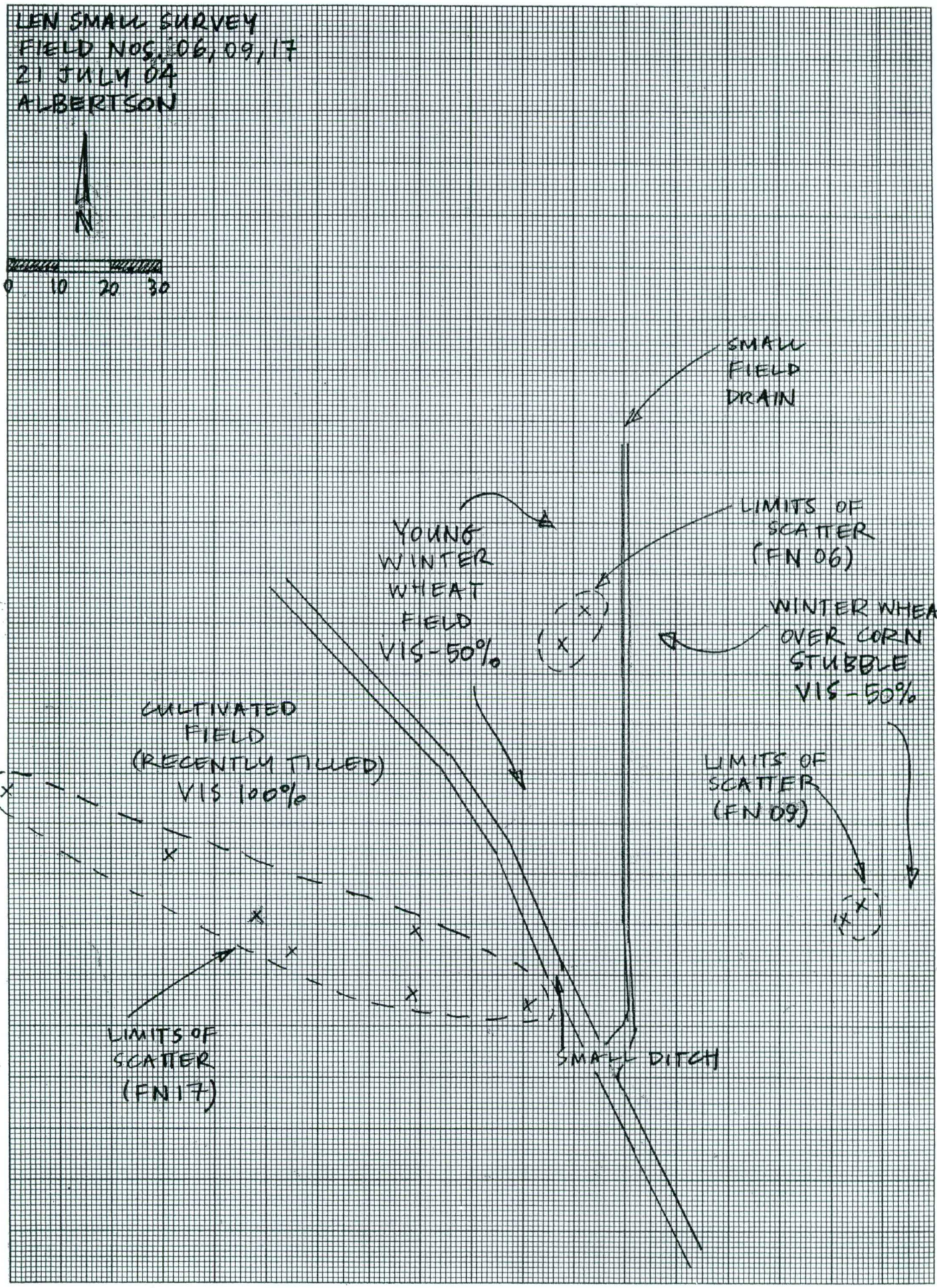
Number of Prehistoric Artifacts (count or estimate): 7 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface fragment (2); hammerstone fragment (1); untyped scraper (2); utilized flake (1); tertiary flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 20 **State Site No.:** 575
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SESWSW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105246 **UTM East:** 293604 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies south of a broad depression leading out in the most recent meader of the Mississippi River. The depression may represent a former distributary channel or crevasse. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 889
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

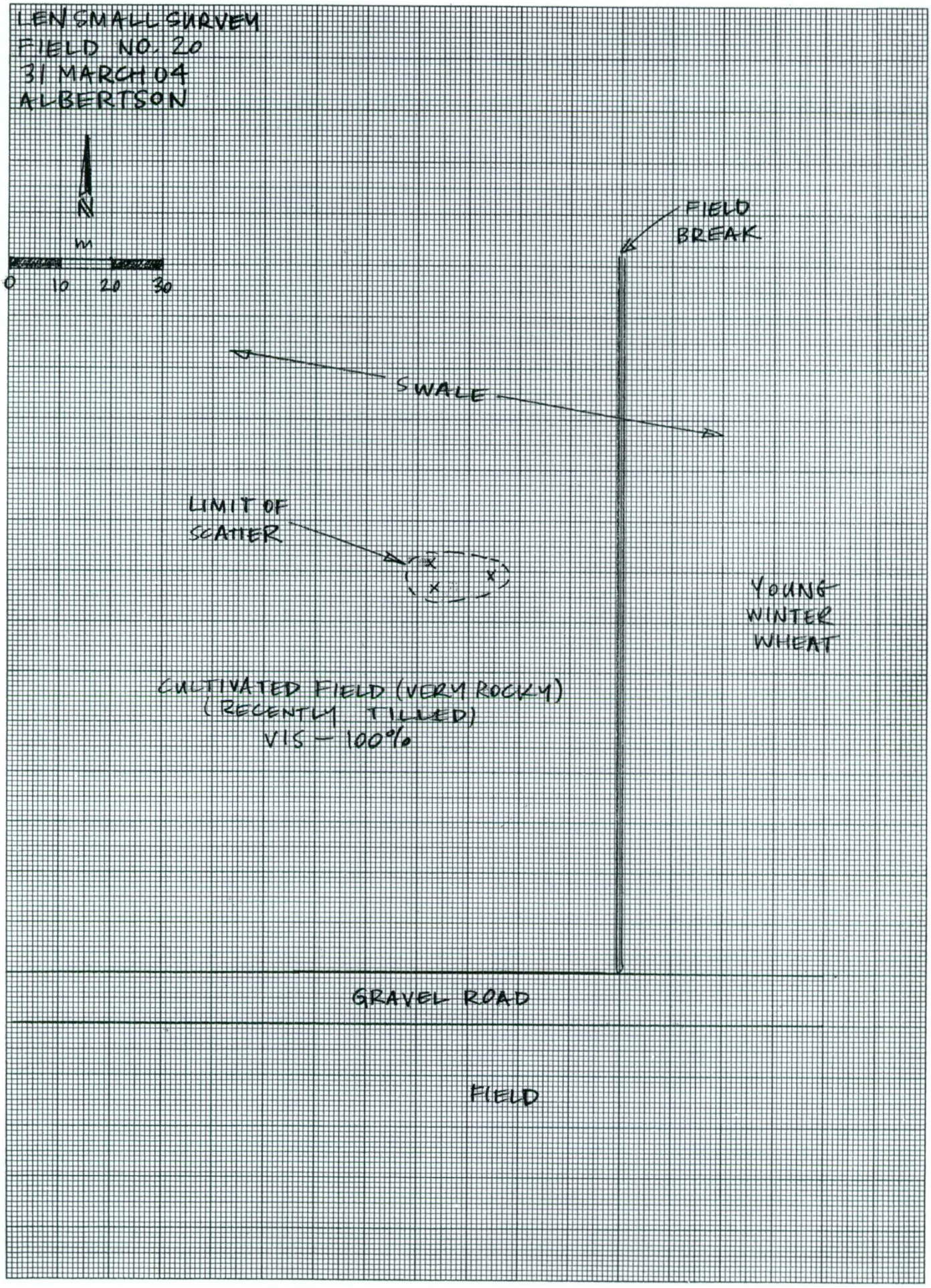
Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k (1); flake fragment (1); shatter (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:** Y	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:** Y	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: PP/K is anuntyped arrow point. It resembles a variety of Late Woodland-Mississippi forms.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 21 **State Site No.:** 576
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWSWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105353 **UTM East:** 292542 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1038
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 10 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: untyped scraper (2); utilized flake (1); secondary flake (1); tertiary flake (1); flake fragment (5)

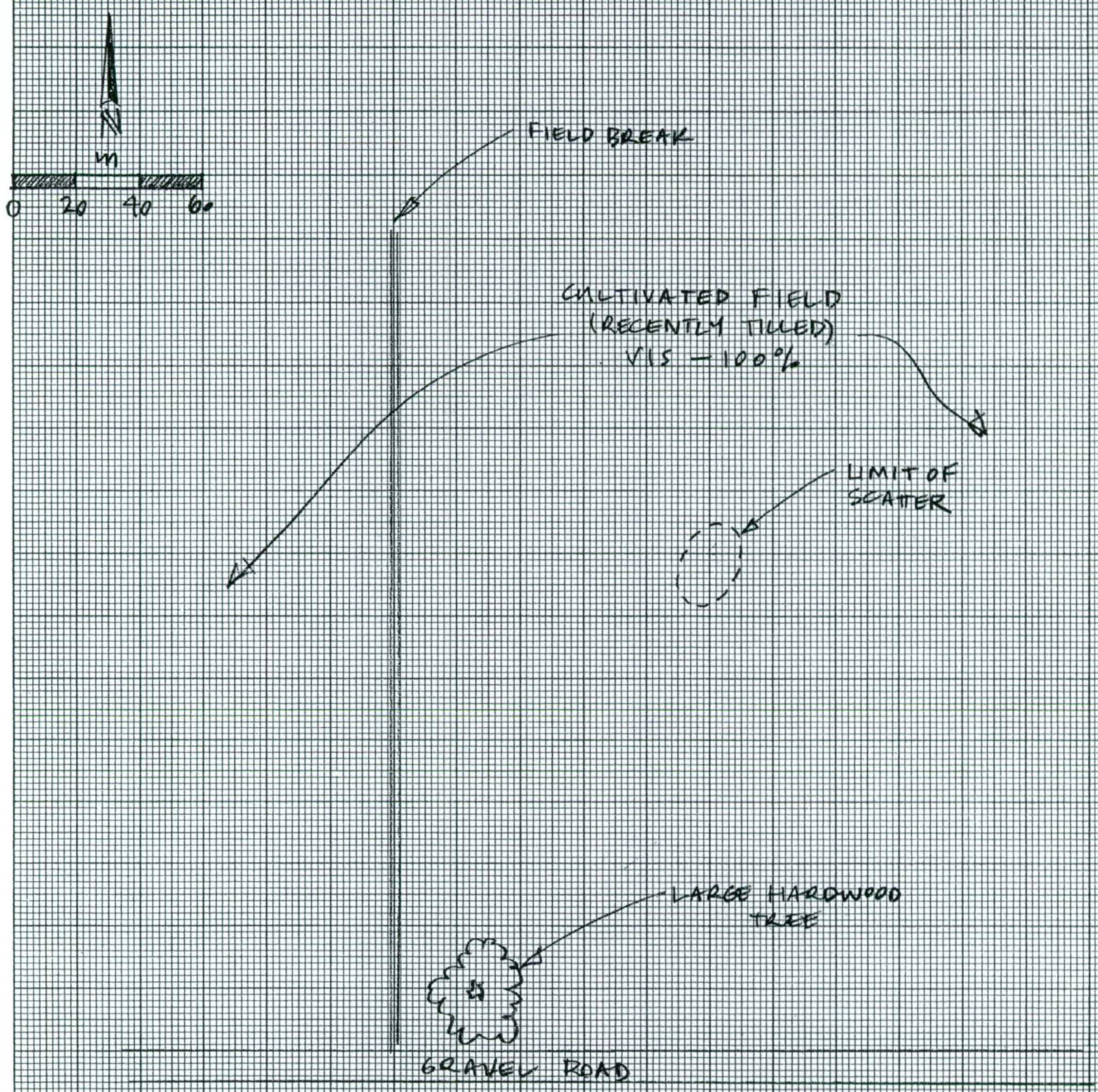
TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

LEN SMALL SURVEY
FIELD NO. 21 (REVISED)
31 MARCH 04
ALBERTSON



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 22 **State Site No.:** 577
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWSWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105231 **UTM East:** 292651 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies along the western margin of a ridge terminus a short distance north of an unnamed gravel road. Ridge appears to project from an older, remodeled terrace to the south. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1677
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 8 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: utilized flake (2); tertiary flake (4); flake fragment (2)

TEMPORAL AFFILIATION (check all that apply)

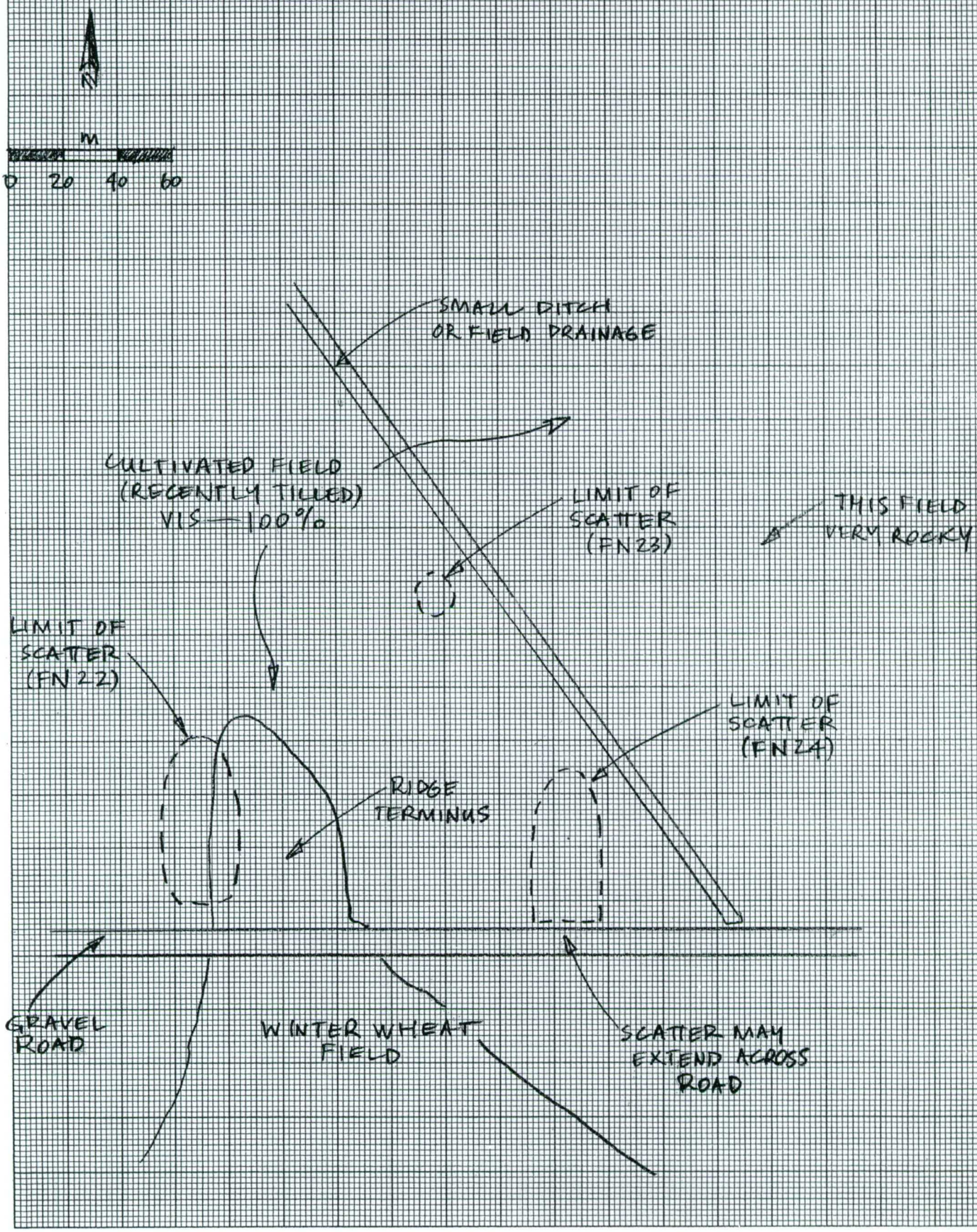
Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

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LEN SMALL SURVEY
FIELD NOS. 22, 23, AND 24
31 MARCH 04
ALBERTSON



ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 23 **State Site No.:** 578
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SESWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105312 **UTM East:** 292738 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, immediately southwest of a small field drainage. The field was recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 883
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

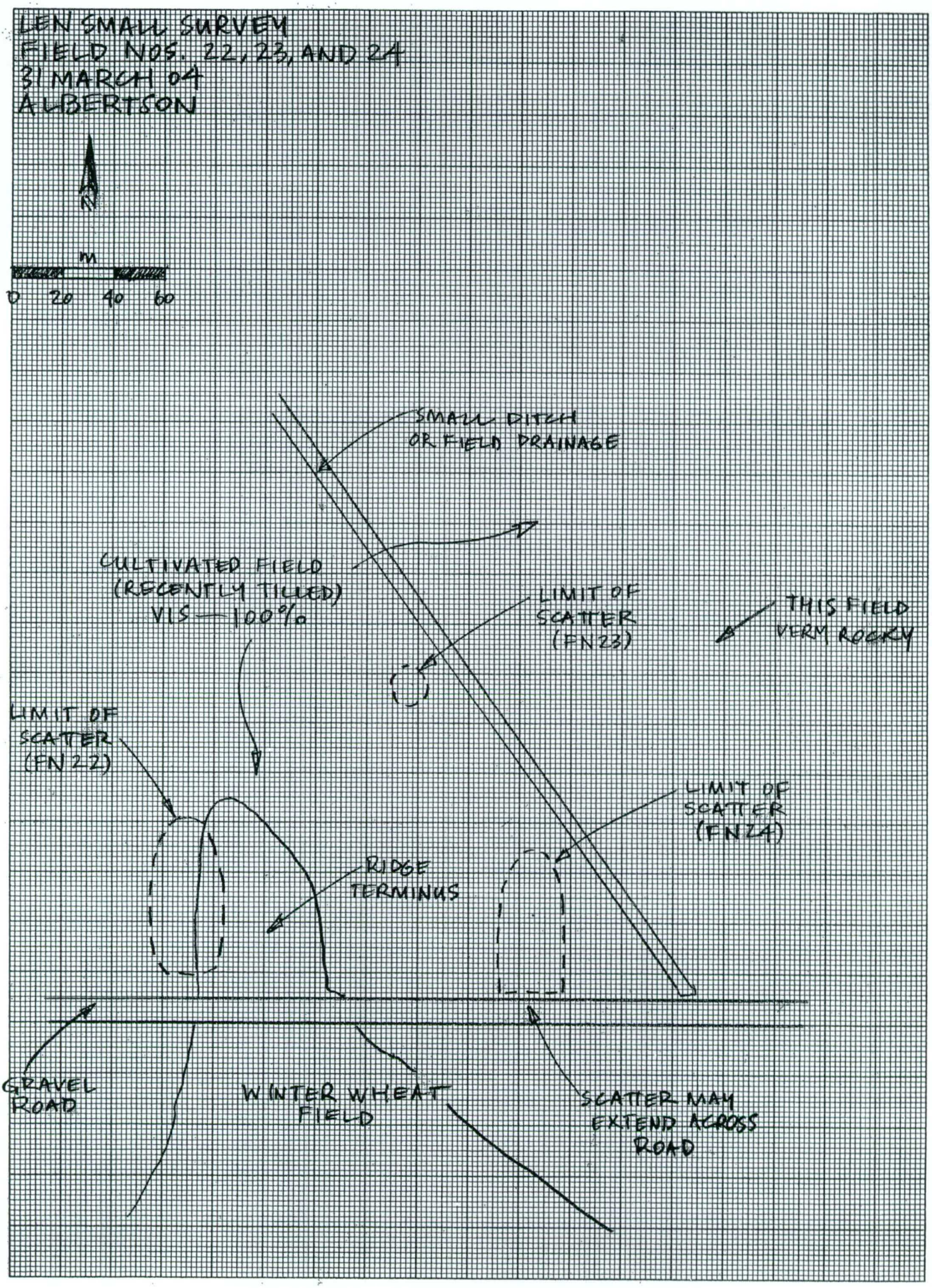
Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k (1); crude biface (1); tertiary flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:** Y	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:** Y	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: PP/K is untyped but resembles several Middle to Late Woodland types; particularly Steuben. The remainder of the assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 24 **State Site No.:** 579
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SESWSE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4105216 **UTM East:** 292771 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Lake Milligan **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies along the eastern margin of a ridge projection. Occupies a cultivated field (tilled prior to survey) along the north side of a gravel road. It may continue across the road to the south. Not confirmed, was outside of the present study area.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1259
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

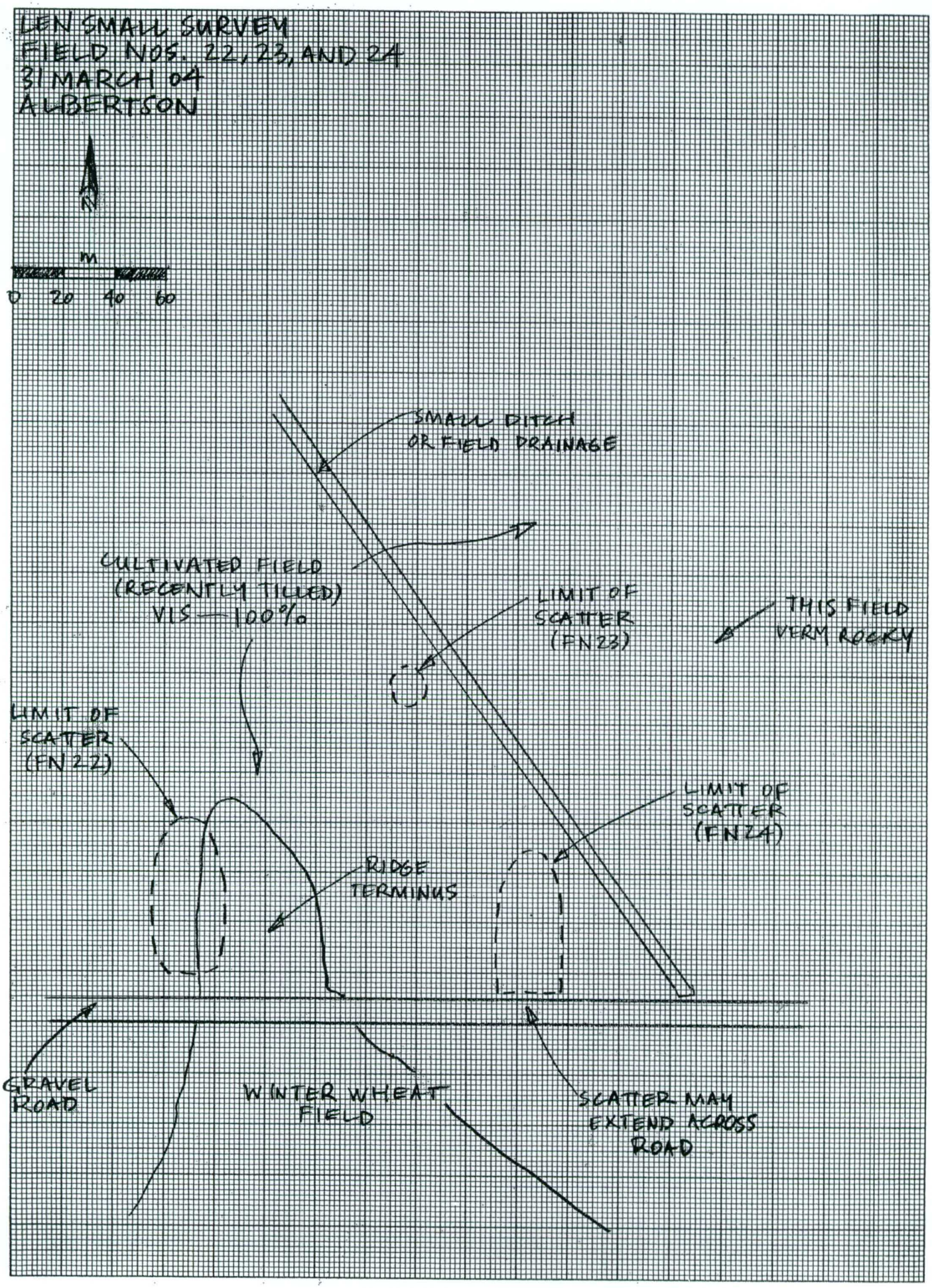
Number of Prehistoric Artifacts (count or estimate): 15 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: proximal pp/k fragment (1); biface (4); biface fragment (5); endscraper (1); uniface fragment (1); core fragment (1); flake fragment (1); fire-cracked rock (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: Unfortunately all recovered materials were non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 40 **State Site No.:** 580
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE **1/4s:** NWNENW **Section:** 33 **Township:** 16 S **Range:** 2
Align **1/4s:** **Section:** 0 **Township:** 0 **Range:** 0
Align **1/4s:** **Section:** 0 **Township:** 0 **Range:** 0
Align **1/4s:** **Section:** 0 **Township:** 0 **Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106664 **UTM East:** 292235 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnnamed Lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Find lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field. Field was in corn stubble at the time of survey. Lies along the west side of a ditch coming from Mr. Ice's shop to the north.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Cultivated Stubble **Visibility (%):** 50
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

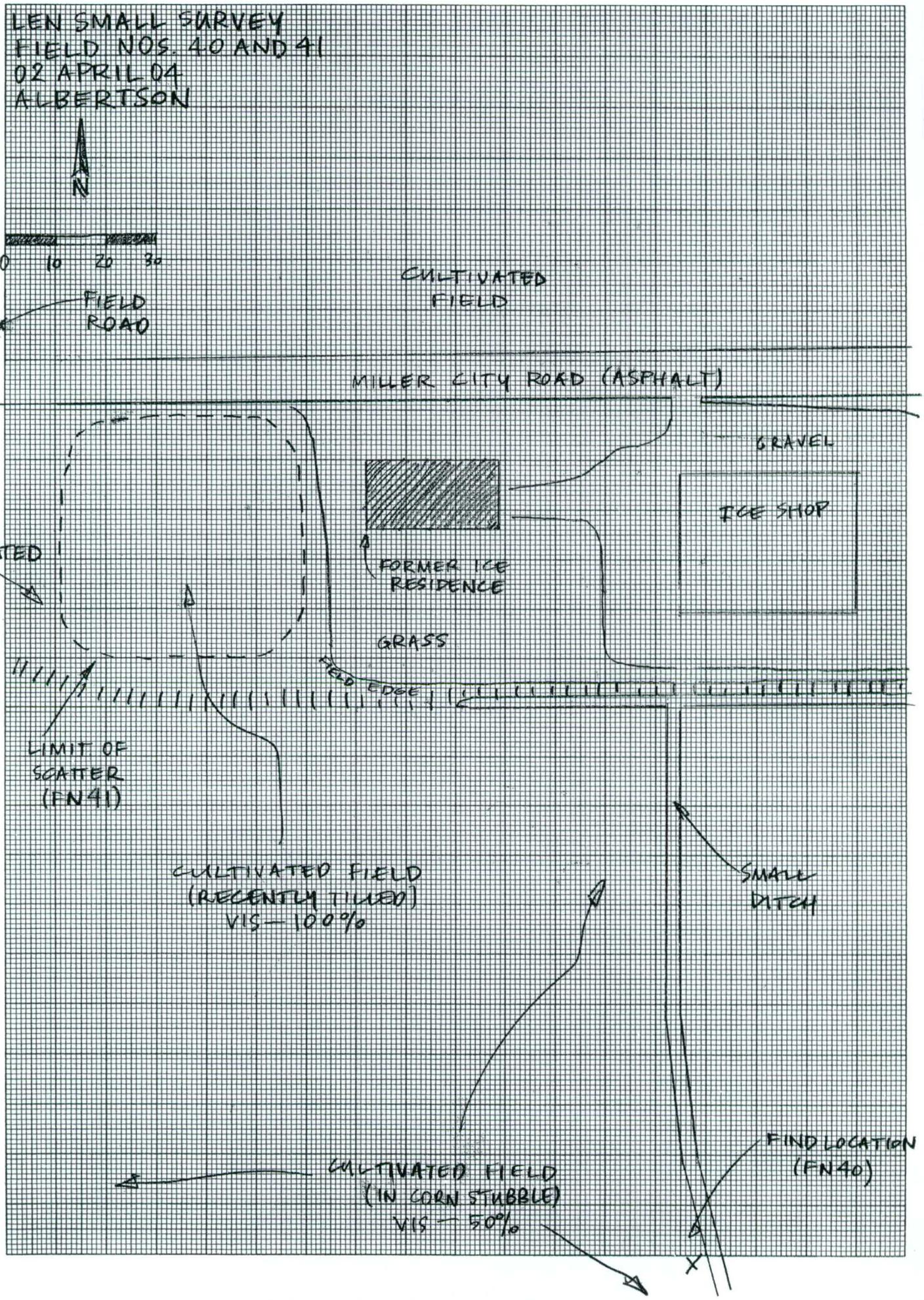
MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: utilized flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y **Late Archaic:** **Mississippian:** **Colonial (1673-1780):**
Paleoindian: **Woodland:** **Upper Mississippian:** **Pioneer (1781-1840):**
Archaic: **Early Woodland:** **Protohistoric:** **Frontier (1841-1870):**
Early Archaic: **Middle Woodland:** **Historic Native American:** **Early Industrial (1871-1900):**
Middle Archaic: **Late Woodland:** **Historic (generic):** **Urban Industrial (1901-1945):**
Post-War (1946-present):
Description: The item recovered at this locus was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 41 **State Site No.:** 581
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NWNENW	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106804 **UTM East:** 292135 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 100
Nearest Water Supply: Unnamed Lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Site is found along the southern side of Miller City Rd., immediately west of the Ice residence. Site lies along the margin of a remodled terrace feature to north. May be artificially elevated above terrace level also. Lies in a recently tilled field.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1427
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

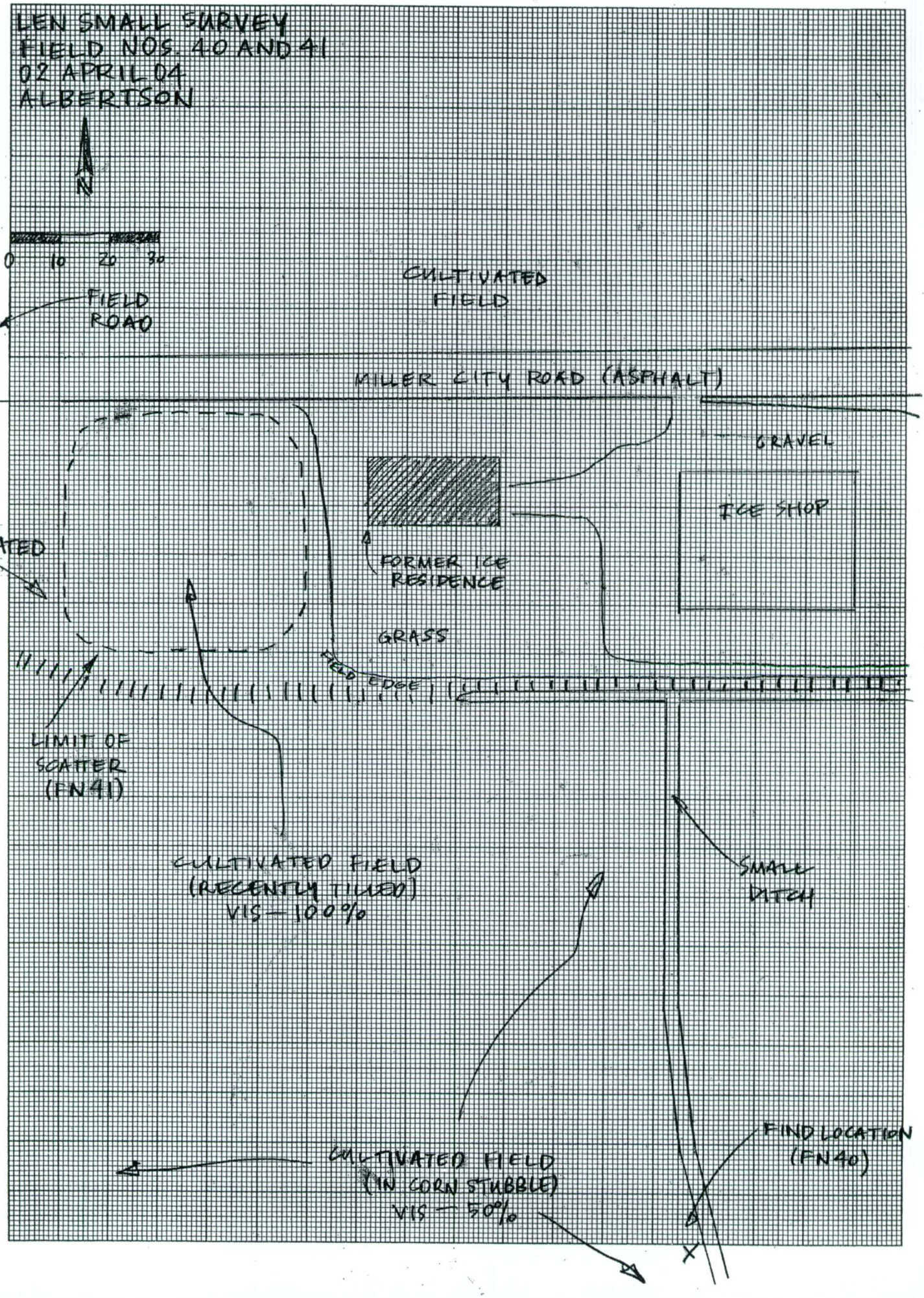
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 30
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: flake fragment (2); stoneware (5); porcelain (3); whiteware (6); container glass (7); milk glass (6); ceramic insulator (1); bolt (1); ceramic drainage pipe fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The prehistoric assemblage was non-diagnostic. The historic affiliation is based on the occurrence of amethyst glass (ca. 1880-1920) in the assemblage. Other artifacts appear to be 20th century so temporal range may be limited to Urban Industrial only.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N


LEN SMALL SURVEY
FIELD NOS. 40 AND 41
02 APRIL 04
ALBERTSON
N
0 10 20 30
CULTIVATED FIELD
FIELD ROAD
MILLER CITY ROAD (ASPHALT)
GRAVEL
ICE SHOP
FORMER ICE RESIDENCE
AREA ELEVATED
GRASS
FIELD EDGE
LIMIT OF SCATTER (FN41)
CULTIVATED FIELD (RECENTLY TILLED) VIS – 100%
SMALL DITCH
FIND LOCATION (FN40)
CULTIVATED FIELD (IN CORN STUBBLE) VIS – 50%
46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 42 **State Site No.:** 582
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWNENE	**Section:** 33	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106424 **UTM East:** 292070 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Unnamed Lake **Drainage:** Mississippi 10
Soil Association: Oakville-Lamont-Alvin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. The area to the south and east of the site is covered in sand from the 1993 flood.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 875
Ground Cover (List up to 3): Bare **Visibility (%):** 75
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

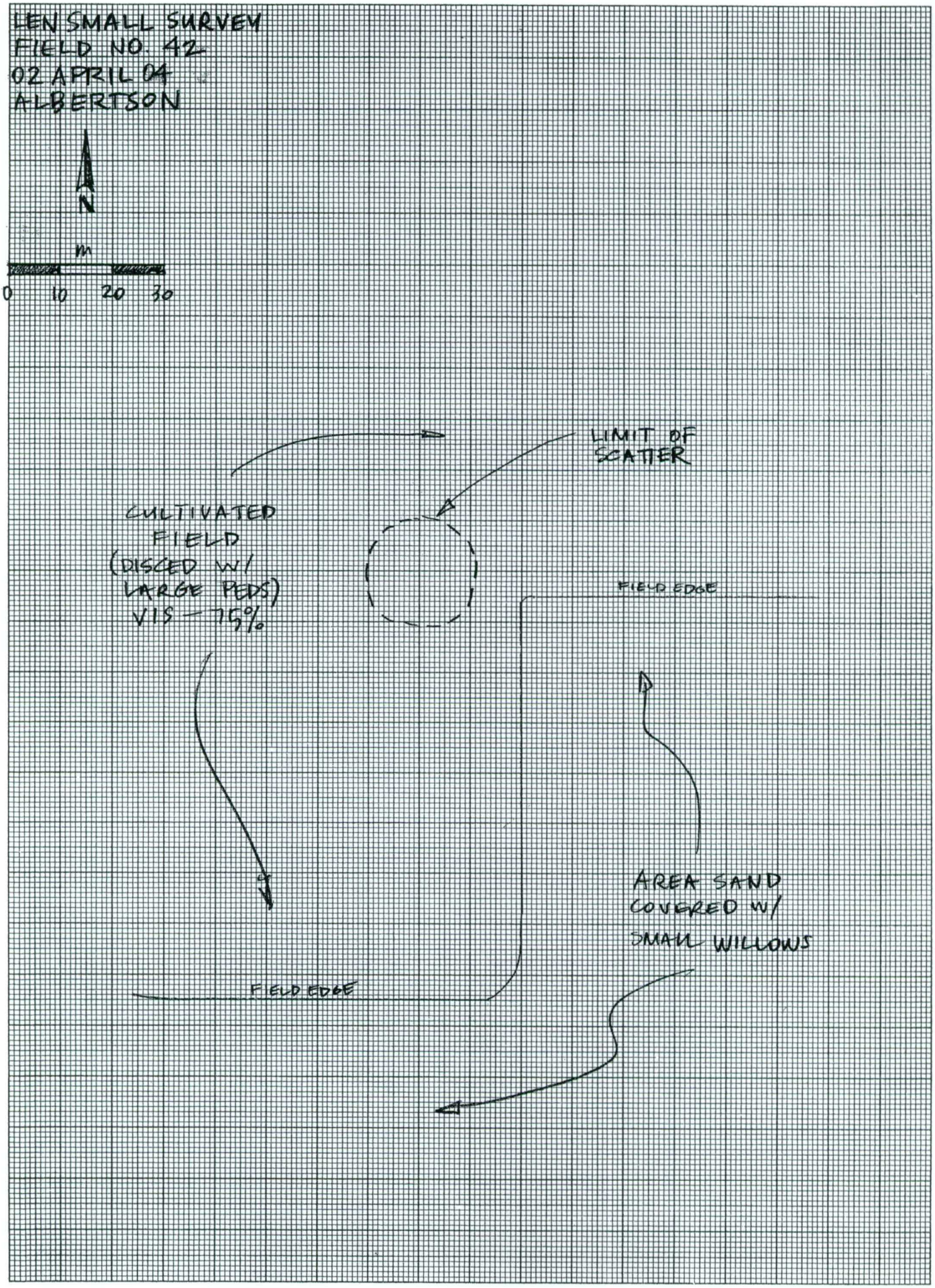
Number of Prehistoric Artifacts (count or estimate): 7 **Number of Historic Artifacts (count or estimate):** 13
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: proximal pp/k fragment (1); blade flake (1); flake fragment (5); stoneware (4); whiteware (1); container glass (7); glass playing marble (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:** Y	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:** Y	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: Diagnostic prehistoric component assignment based on the recovery of a Dickson Cluster (after Justice 1987) pp/k. All historic artifacts appear to be 20th century. No definitive 19th century specimens were observed or recovered.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 03/31/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 52 **State Site No.:** 583
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NWNWNW	**Section:**	34	**Township:**	16 S	**Range:**	2
Align		**1/4s:**	**Section:**	0	**Township:**	0	**Range:**	0
Align		**1/4s:**	**Section:**	0	**Township:**	0	**Range:**	0
Align		**1/4s:**	**Section:**	0	**Township:**	0	**Range:**	0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106749 **UTM East:** 293403 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated, gravelly field, recently tilled prior to survey. Lies immediately south of a wood-lined ditch.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1315
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

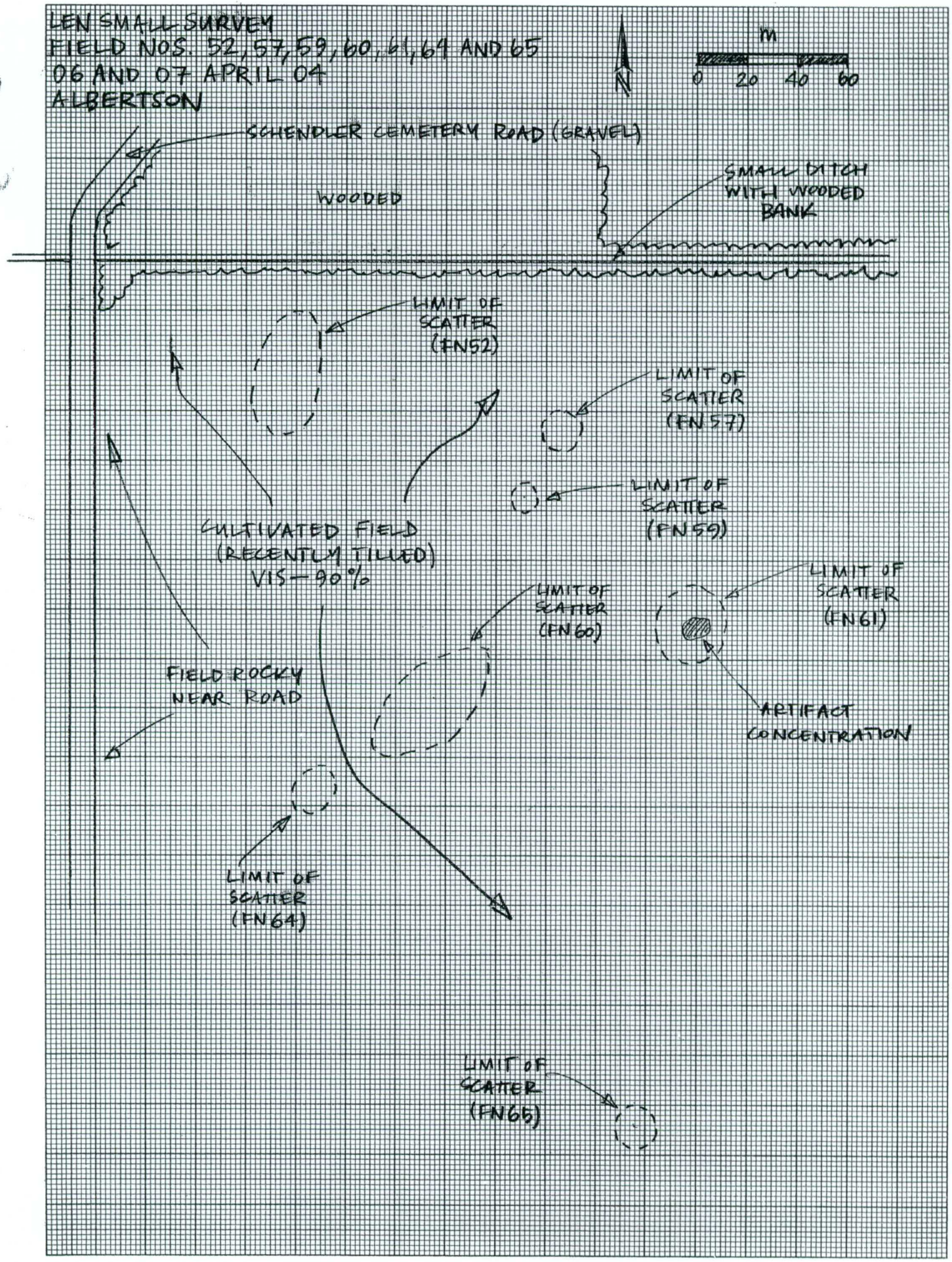
Number of Prehistoric Artifacts (count or estimate): 10 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: tertiary flake (3); flake fragment (7)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/05/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 53 **State Site No.:** 584
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106759 **UTM East:** 293618 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 99
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Find lies in a broad, generally level area of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. Is found along the south side of a wood-lined ditch, a short distance west of an abandoned, four-square house.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find



SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: cobble core (1)

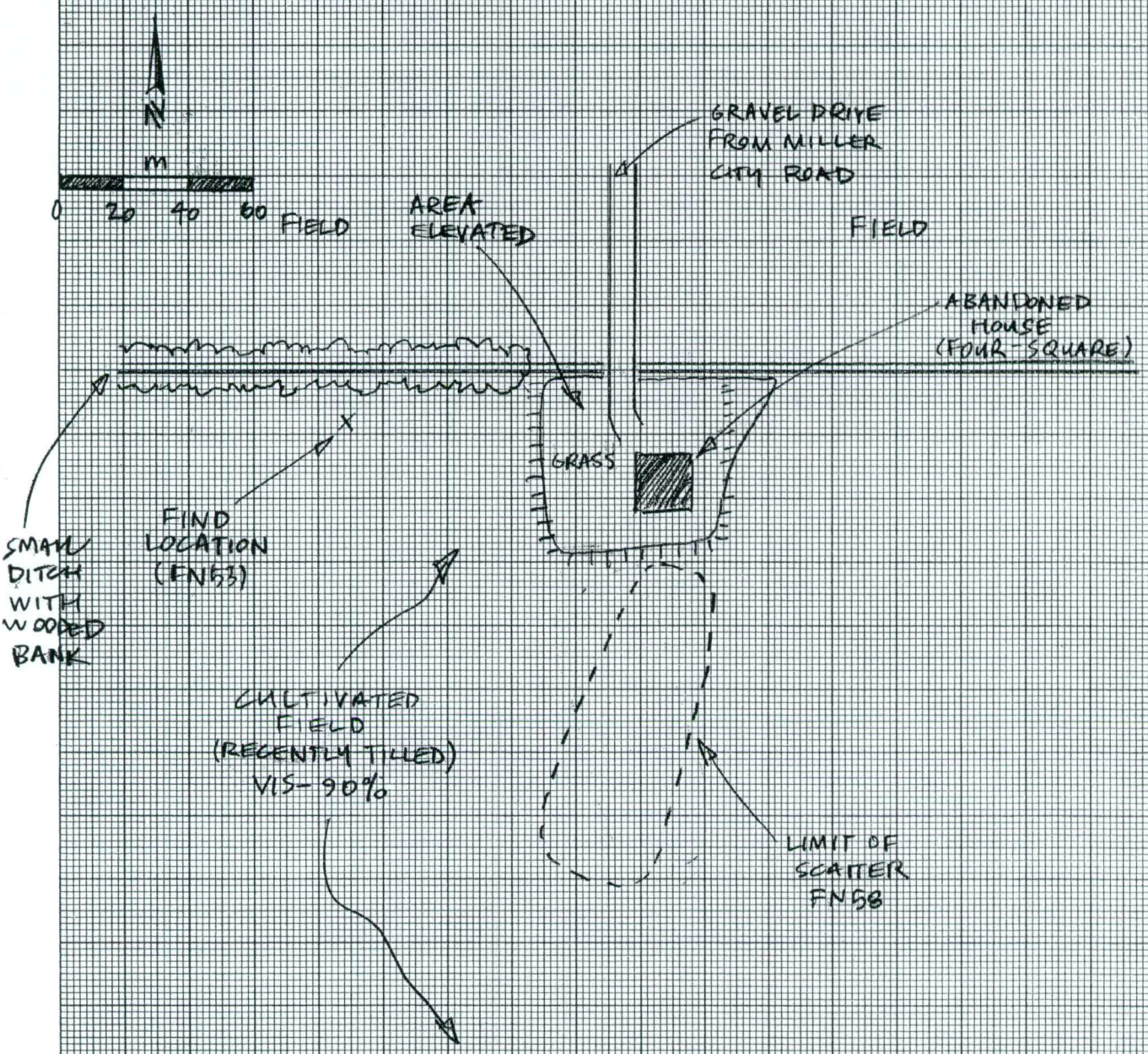
TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered item was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/05/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

LEN SMALL SURVEY
FIELD NO. 53 AND 58
06 APRIL 04
ALBERTSON



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 54 **State Site No.:** 585
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NWNENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106730 **UTM East:** 293859 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. Lies at the intersection of two small field ditches.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 773
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

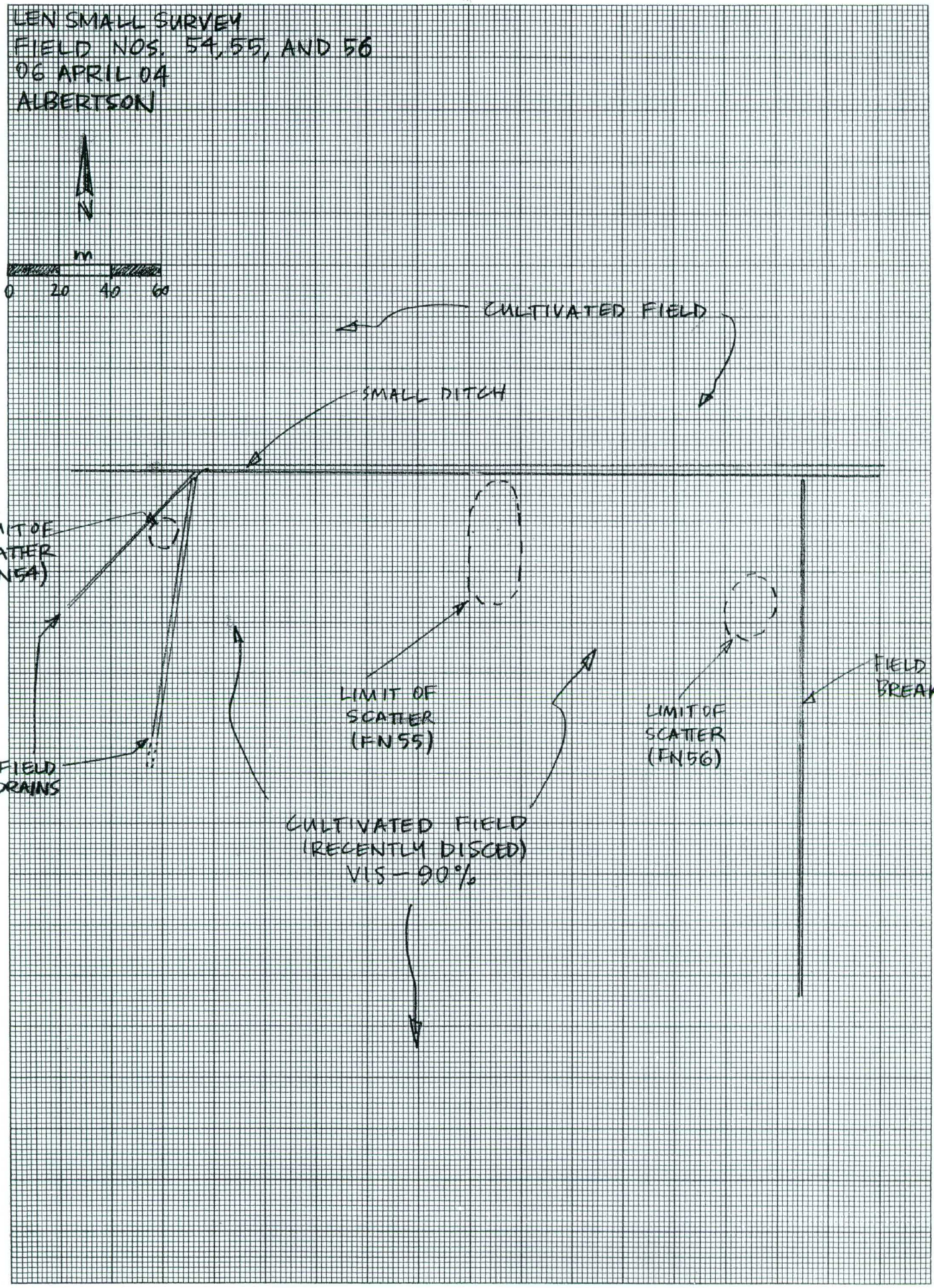
Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: untyped scraper (1); secondary flake (1); tertiary flake (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 55 **State Site No.:** 586
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:**	NENENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106745 **UTM East:** 293989 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. A linear depression to the north may represent a former tributary of Grand Lake. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1027
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

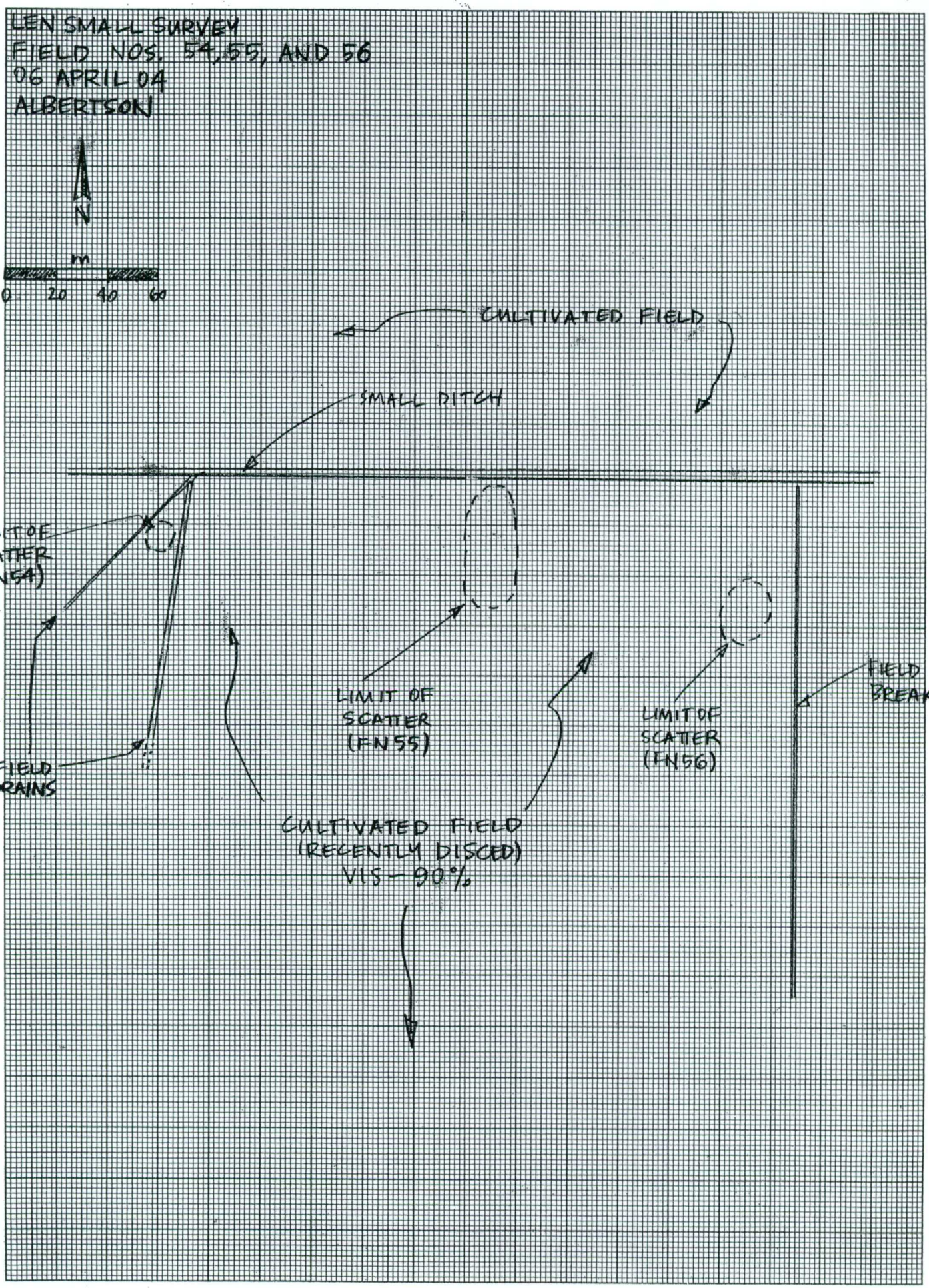
Number of Prehistoric Artifacts (count or estimate): 9 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: side scraper (2); utilized flake (2); exhausted core (1); hammerstone (1); tertiary flake (2); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 56 **State Site No.:** 587
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NENENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106708 **UTM East:** 294092 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultifvated field, recently tilled prior to survey. Is found along the south side of a small ditch, immediately west of a field break.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1114
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation Unknown

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

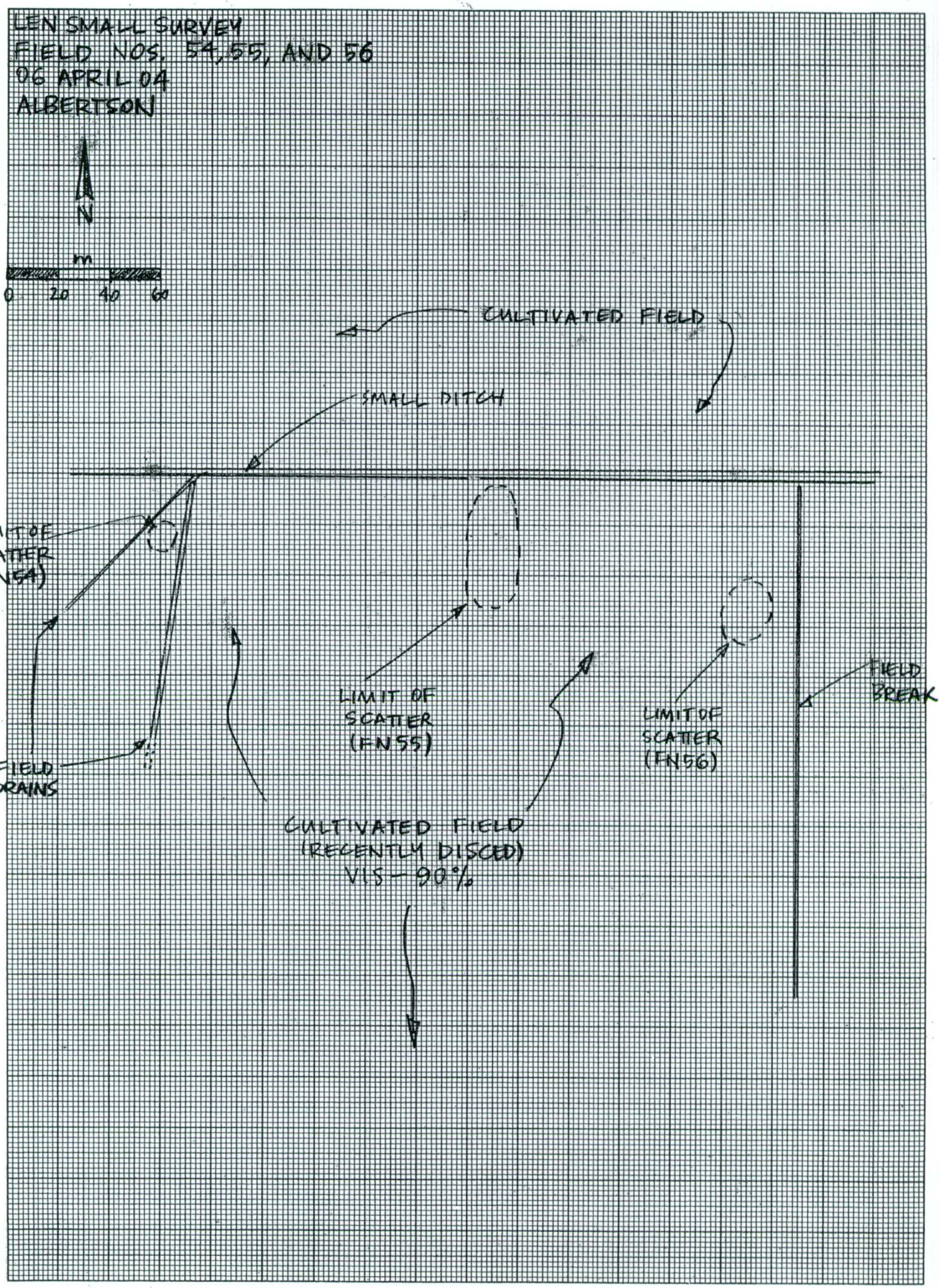
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 2
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: spokeshave (2); broken flake; ironstone (1); ceramic insulator (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):** Y	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The prehistoric artifacts recovered were non-diagnostic. Due to the paucity of recovered historic artifacts a temporal affiliation is not offered.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 57
State Site No.: 588
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106696 **UTM East:** 293552 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Linear depression to north may represent former Grand Lake tributary. Site occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 717
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

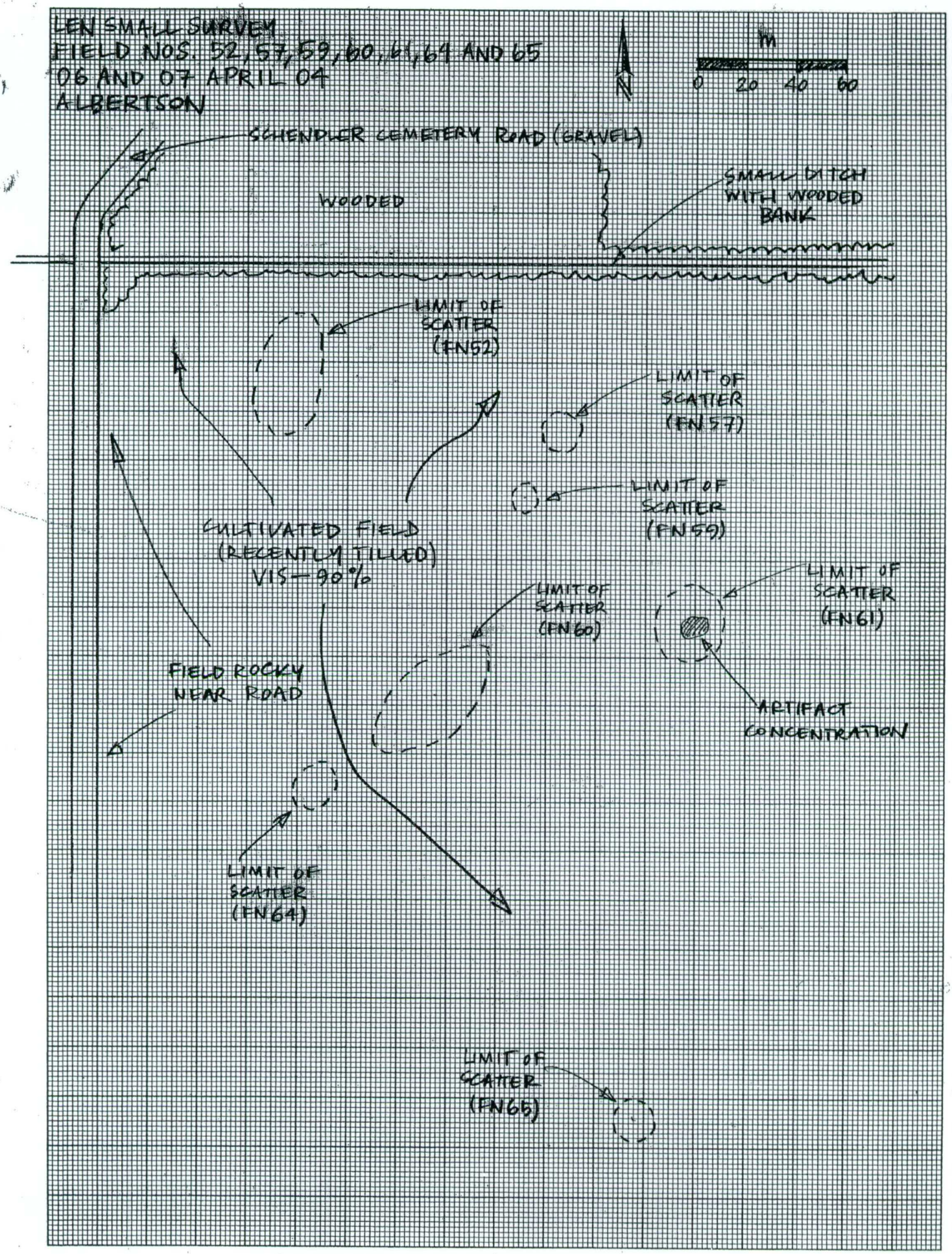
Number of Prehistoric Artifacts (count or estimate): 4
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: biface fragment (1); blade flake (1); secondary flake (1); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
K+E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Field Number: 58
Quadrangle (7.5'): Cache
Site Name:
Revisit: N
State Site No.: 589
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106654 **UTM East:** 293696 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. An abandoned four-square house on an artificially raised piece of ground is found immediately north of the site.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 2588
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

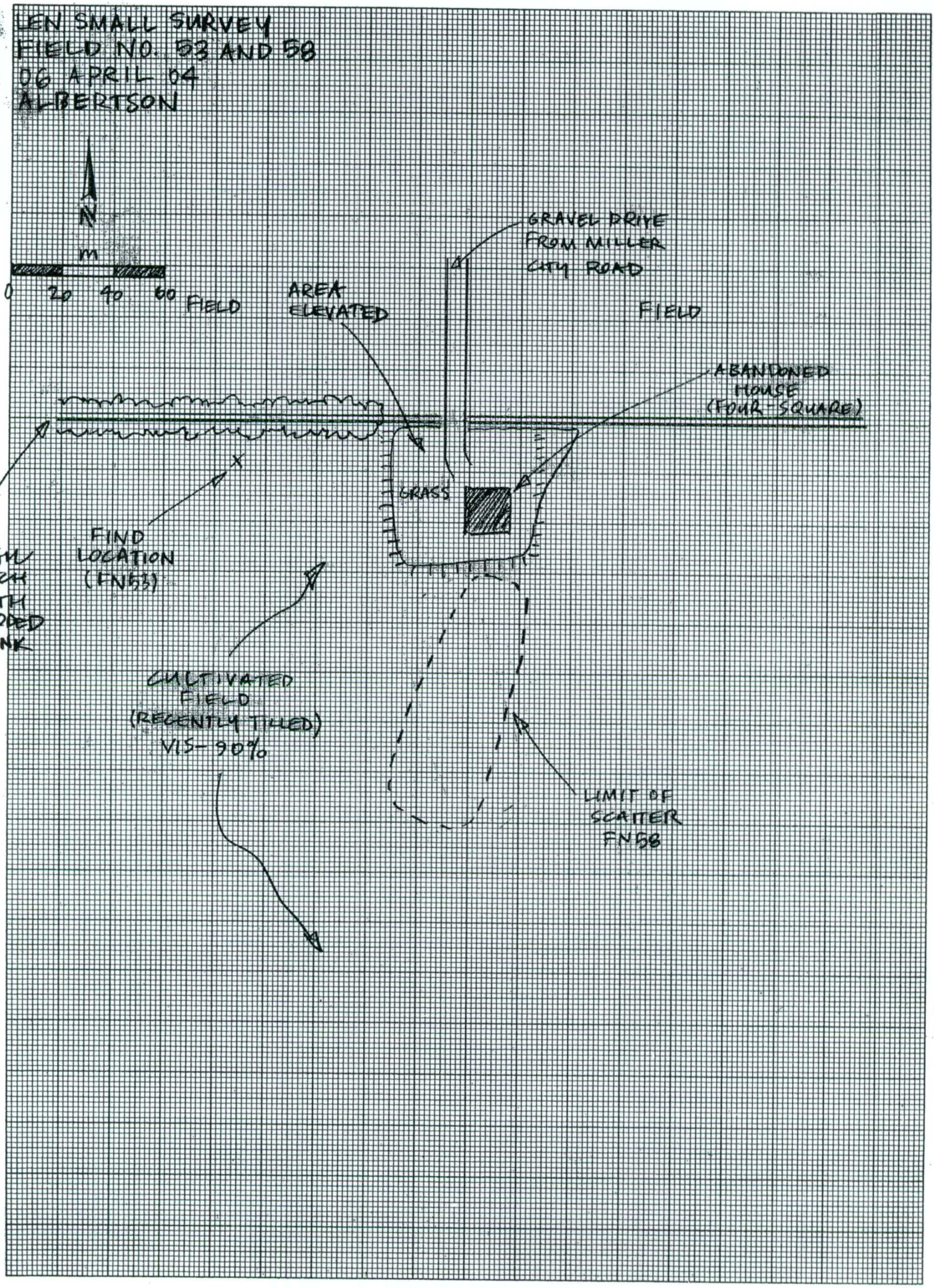
Number of Prehistoric Artifacts (count or estimate): 9
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: untyped scraper (1); utilized flake (2); core fragment (1); primary flake (1); flake fragment (4)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson
Institution: PCI
Survey Date: 04/06/2004
Curation Facility: ISM
Site Report by: E. Albertson
Institution: PCI
Date: 07/14/2004
IHPA Log No.:
IHPA First Sur. Doc. No.:
Compliance Status:
NRHP Listing: N



46 1510
K+E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 59 **State Site No.:** 590
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106658 **UTM East:** 293534 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located a low ridge. A linear depression to the north may represent a former tributary of Grand lake. Site occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 646
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

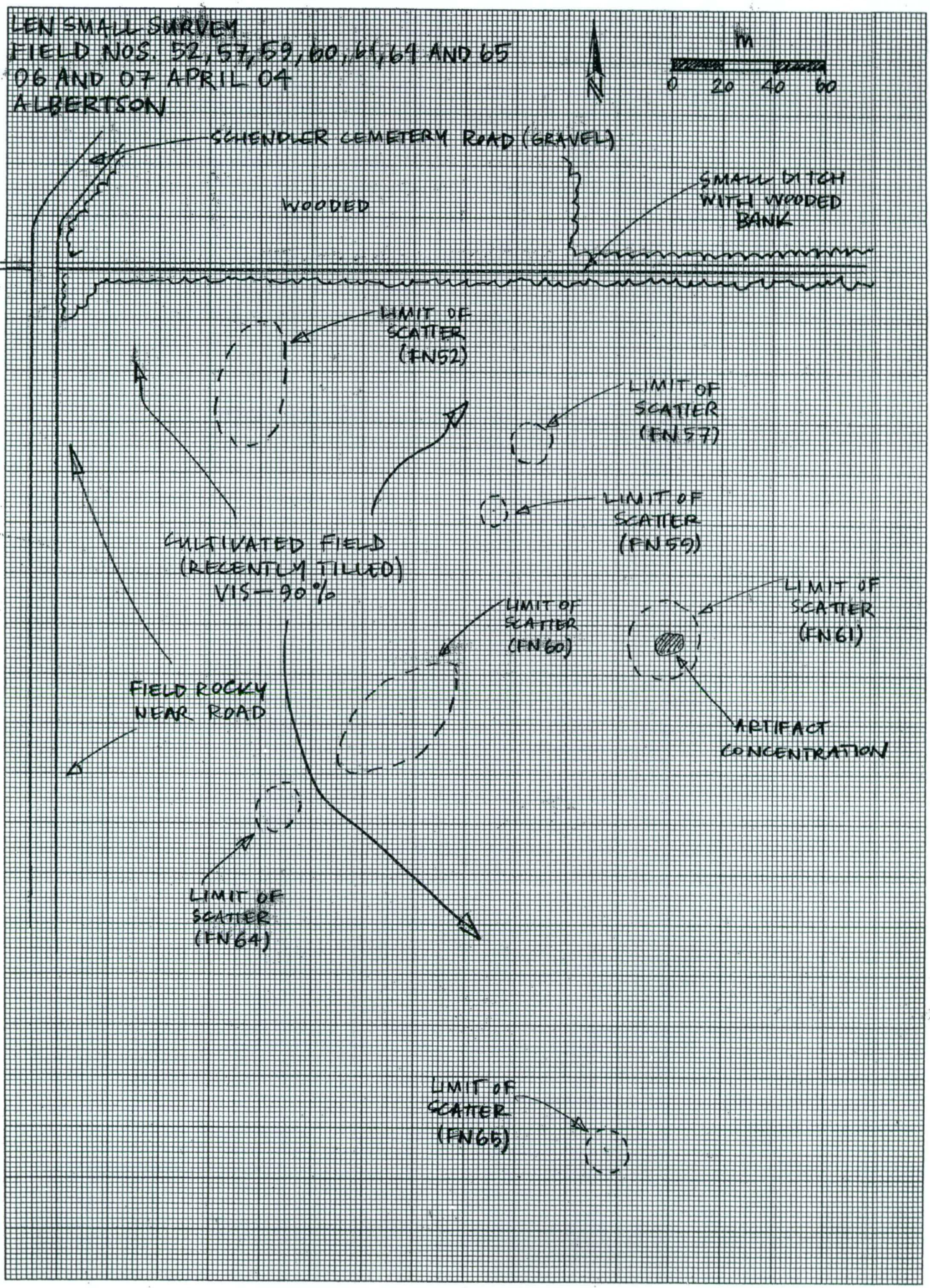
Number of Prehistoric Artifacts (count or estimate): 2 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: adze (1); spokeshave (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510

K•E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 60 **State Site No.:** 591
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NWNWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106628 **UTM East:** 293443 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1565
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

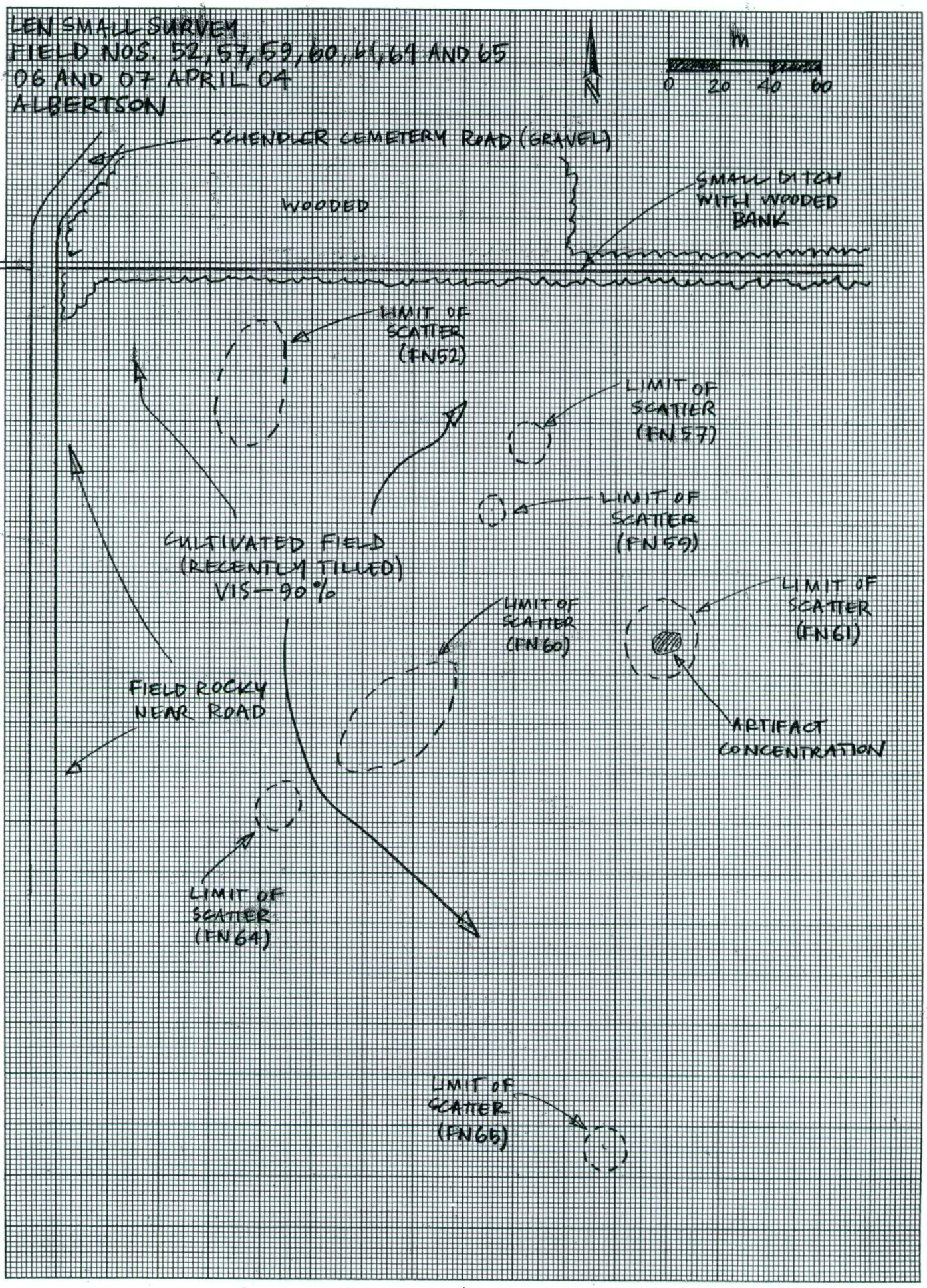
Number of Prehistoric Artifacts (count or estimate): 7 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface (1); bifacial thinning flake (1); secondary flake (3); flake fragment (2)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.
K+E

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 61 **State Site No.:** 592
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106595 **UTM East:** 293600 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 934
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

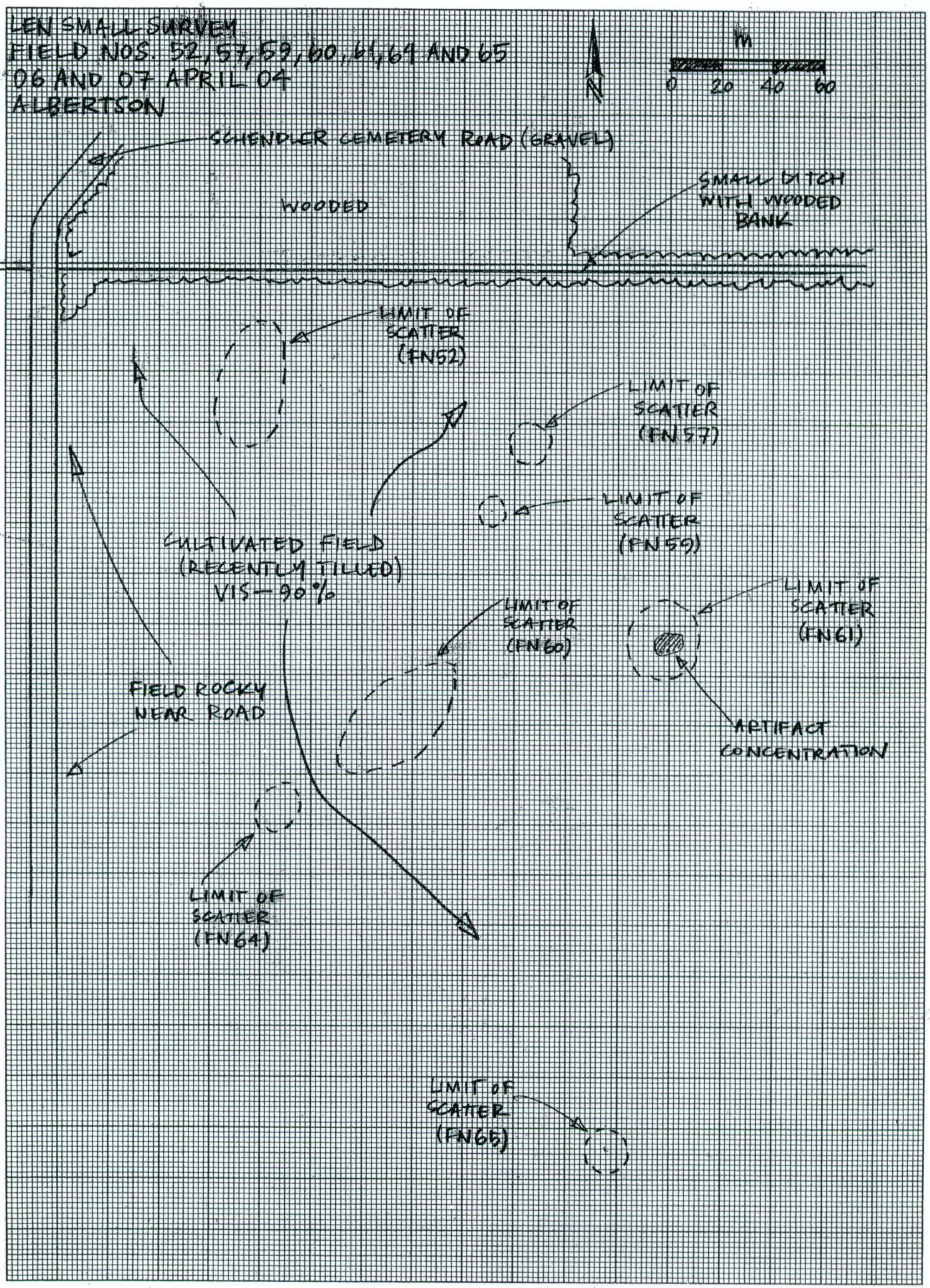
Number of Prehistoric Artifacts (count or estimate): 11 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: spokeshave (1); blade flake (1); cobble core (1); bifacial thinning flake (1); secondary flake (1); tertiary flake (2); flake fragment (4)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510

K•E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 62 **State Site No.:** 593
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** NENENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106592 **UTM East:** 293906 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1502
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

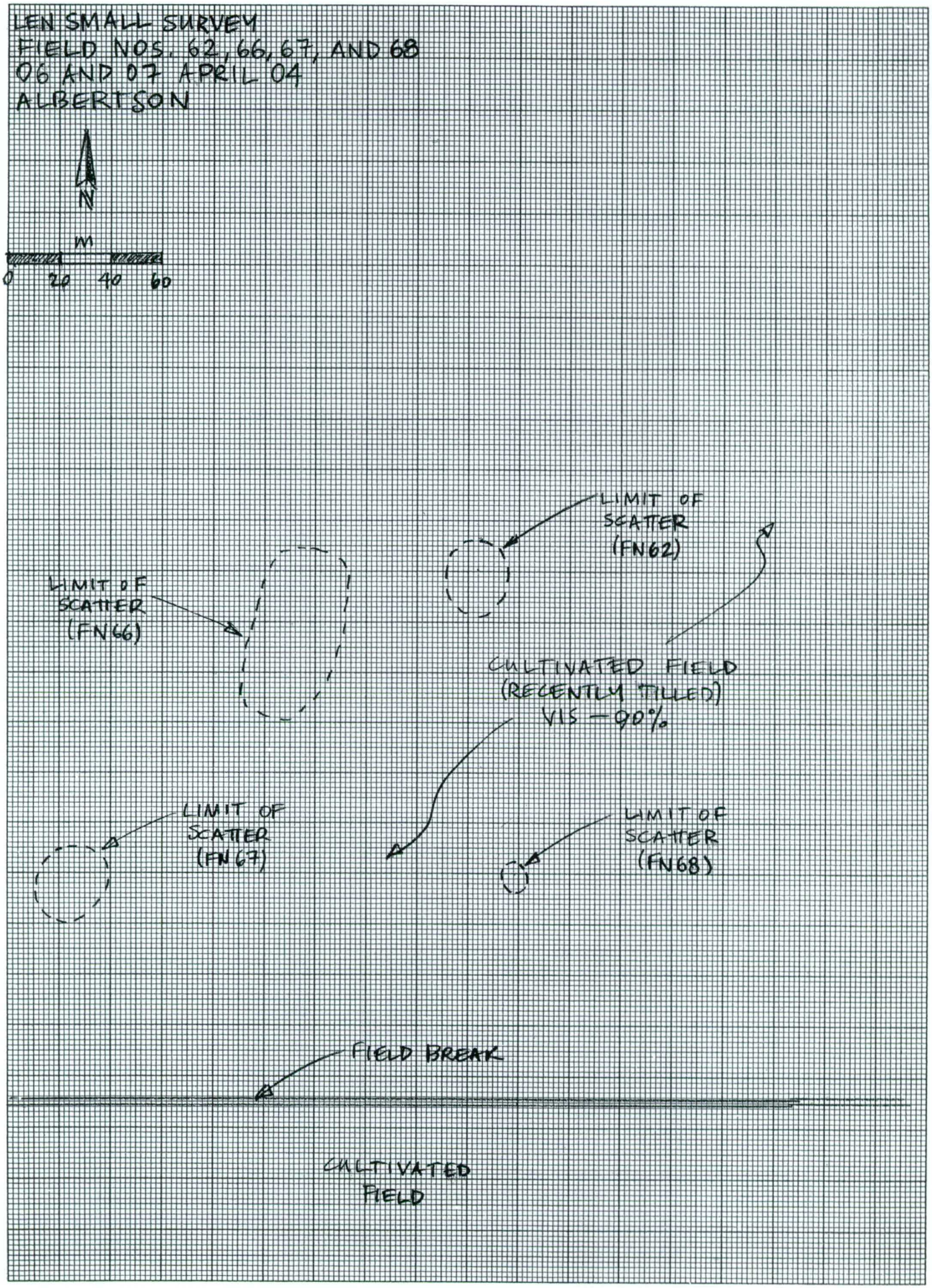
Number of Prehistoric Artifacts (count or estimate): 7 **Number of Historic Artifacts (count or estimate):** 11
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: core fragment (1) tertiary flake (2); flake fragment (4); stoneware (3); whiteware (2); container glass (4); flat glass (1); coal (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The prehistoric artifact assemblage was non-diagnostic. The historic temporal affiliation is based primariliy on the presence of a transfer printed piece of whiteware.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.
K•E

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 63 **State Site No.:** 594
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENENW	NENENW	SWNWNE	NWNWNE	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**				**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**				**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**				**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106588 **UTM East:** 294131 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a cultivated field, recently tilled prior to survey. A large site, it follows what appears to be an old terrace edge associated with nearby Grand Lake, a fomer channel of the Mississippi River.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 5371
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

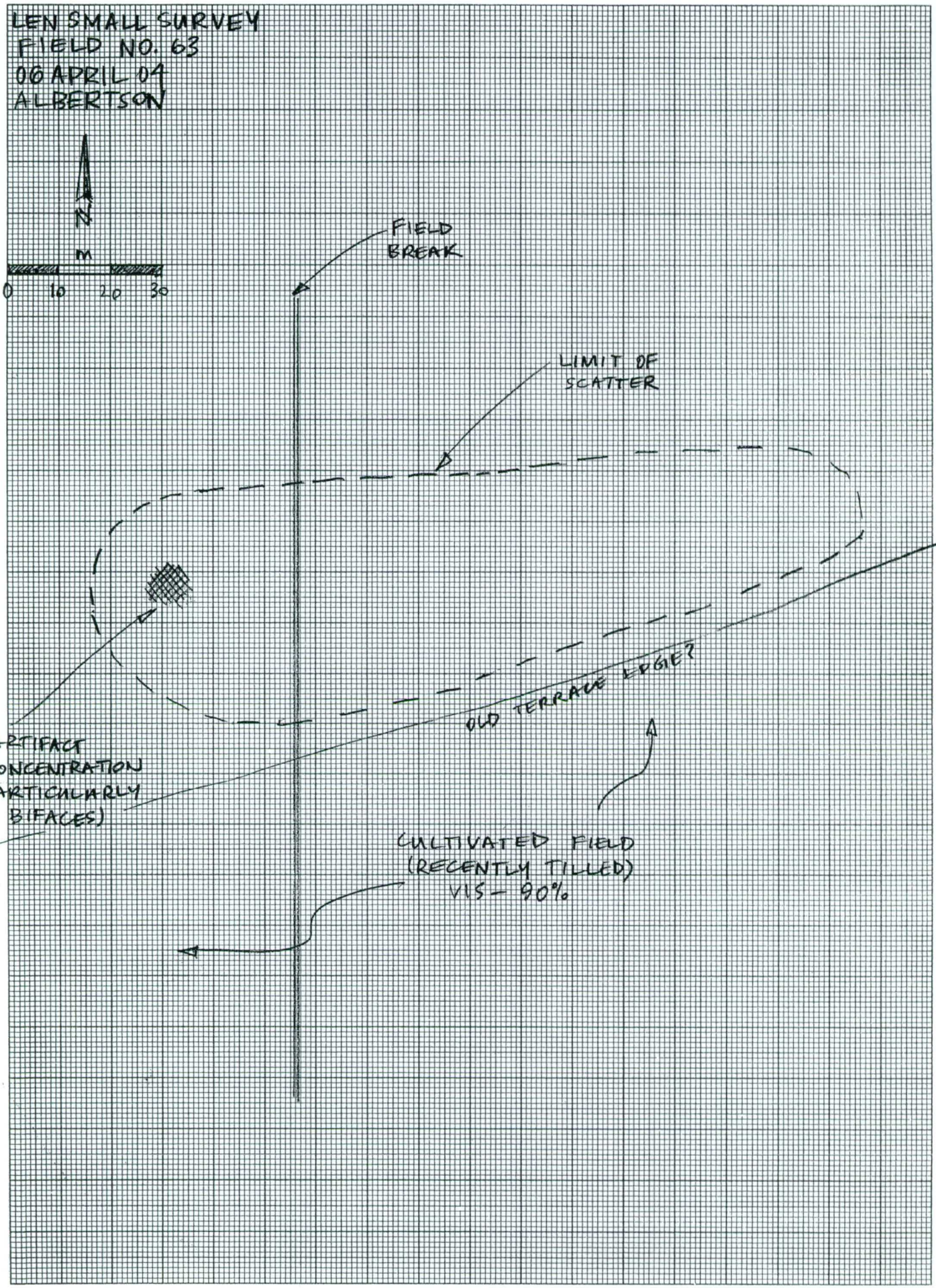
Number of Prehistoric Artifacts (count or estimate): 52 **Number of Historic Artifacts (count or estimate):** 1
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k fragment (4); biface (6); biface fragment (8); spokeshave (1); untyped scraper (1); utilized debitage (2); bifacial thinning flake (1); secondary flake (1); tertiary flake (4); flake fragment (22); fire-cracked rock (2); whiteware (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:** Y	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:** Y	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: A maker's mark on the historic ceramic (whiteware) indicates a late nineteenth century manufacture date. The prehistoric assemblage is assigned temporally based on several pp/k fragments, all of which represent Middle and/or Late Woodland forms.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/06/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.
K•E

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 64
State Site No.: 595
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NWNWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106582 **UTM East:** 293418 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 758
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

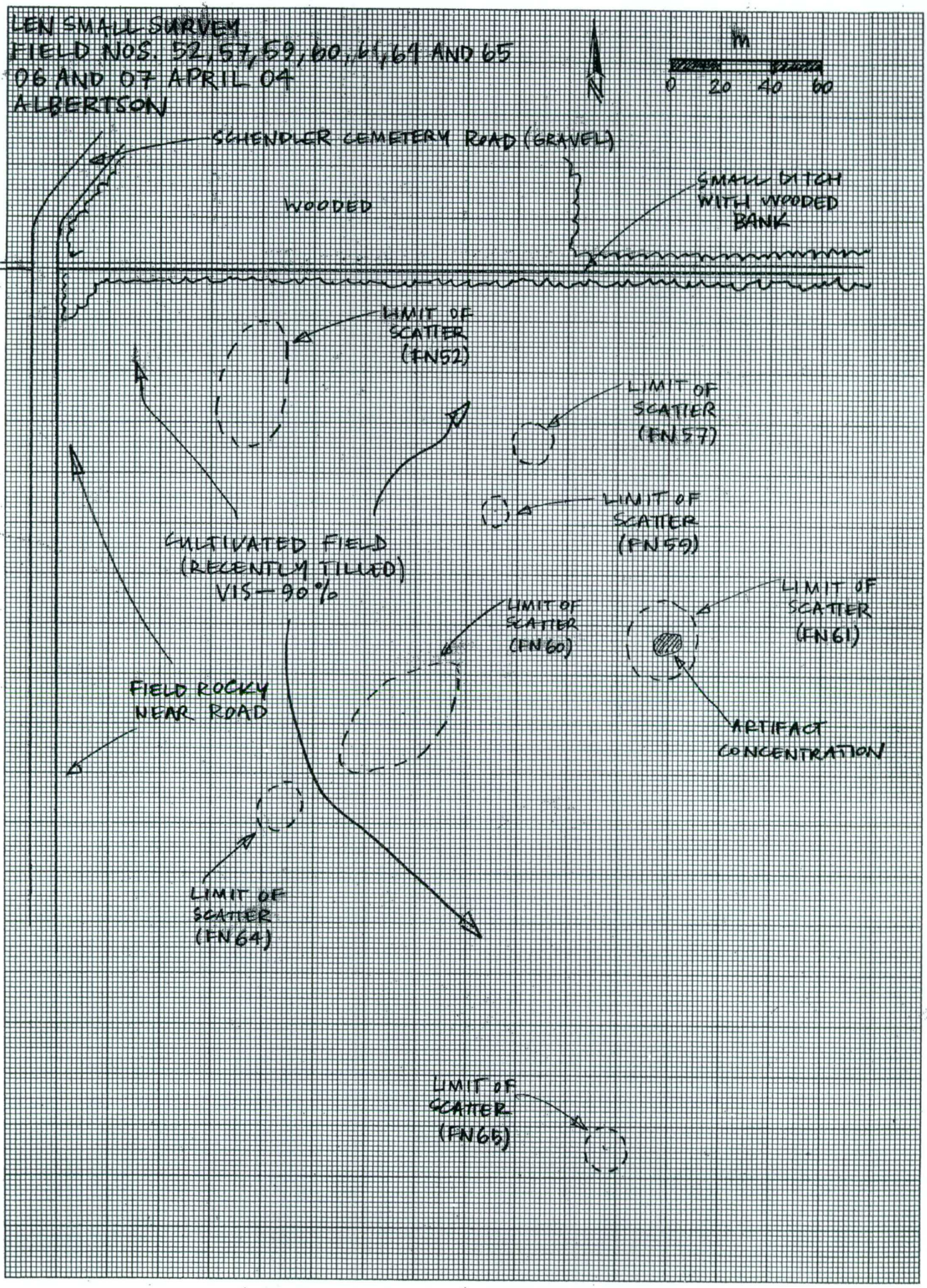
Number of Prehistoric Artifacts (count or estimate): 17
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: untyped scraper (1); sidescraper (1); hammerstone (2); primary flake (1); tertiary flake (5); flake fragment (7)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
K+E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 65 **State Site No.:** 596
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENWNW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106467 **UTM East:** 293508 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 715
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

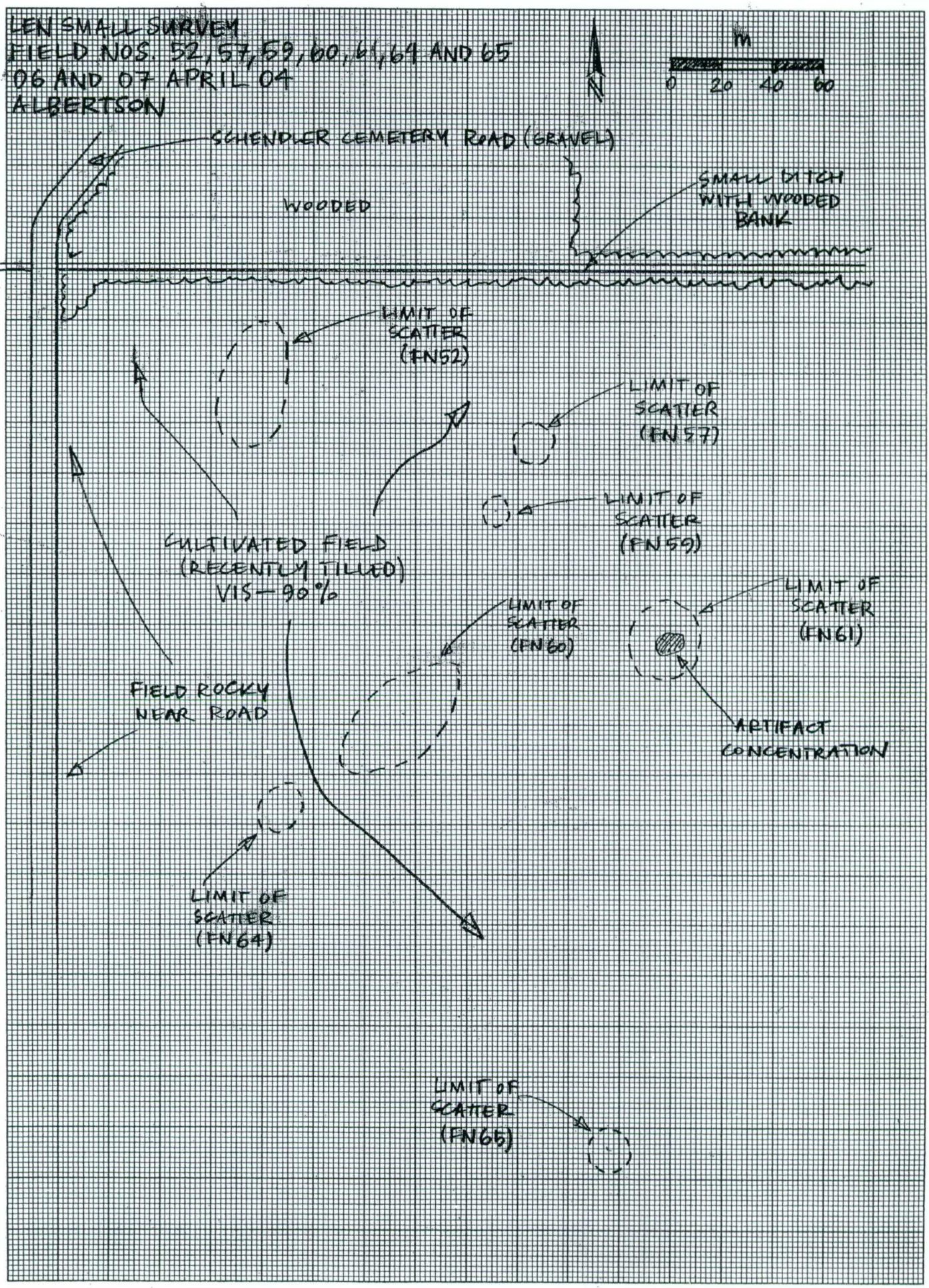
Number of Prehistoric Artifacts (count or estimate): 4 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: bannerstone fragment (1); side scraper (1); untyped scraper (2)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic: Y	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The Archaic temporal assignment is based on the recovered bannerstone.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510

K&E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
KEUFFEL & ESSER CO. MADE IN U.S.A.

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 66
State Site No.: 597
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:**	SWNENW	**Section:**	34	**Township:**	16 S	**Range:** 2
Align		**1/4s:**		**Section:**	0	**Township:**	0	**Range:** 0
Align		**1/4s:**		**Section:**	0	**Township:**	0	**Range:** 0
Align		**1/4s:**		**Section:**	0	**Township:**	0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106564 **UTM East:** 293818 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 1681
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 19
Number of Historic Artifacts (count or estimate): 15
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: Y
Prehistoric Surface Features: N
Historic Surface Features: N
Description: celt fragment (1); biface (3); biface fragment (3); spokeshave (1); utilized flake (3); cobble core (1); tertiary flake (2); flake frag. (5); stoneware (3); whiteware (2); ironstone (1); porcelain (1); container glass (5); milk glass (2); flat glass (1)

TEMPORAL AFFILIATION (check all that apply)

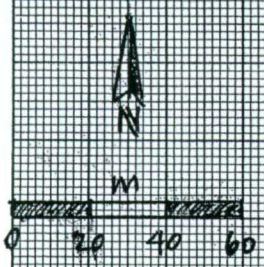
Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

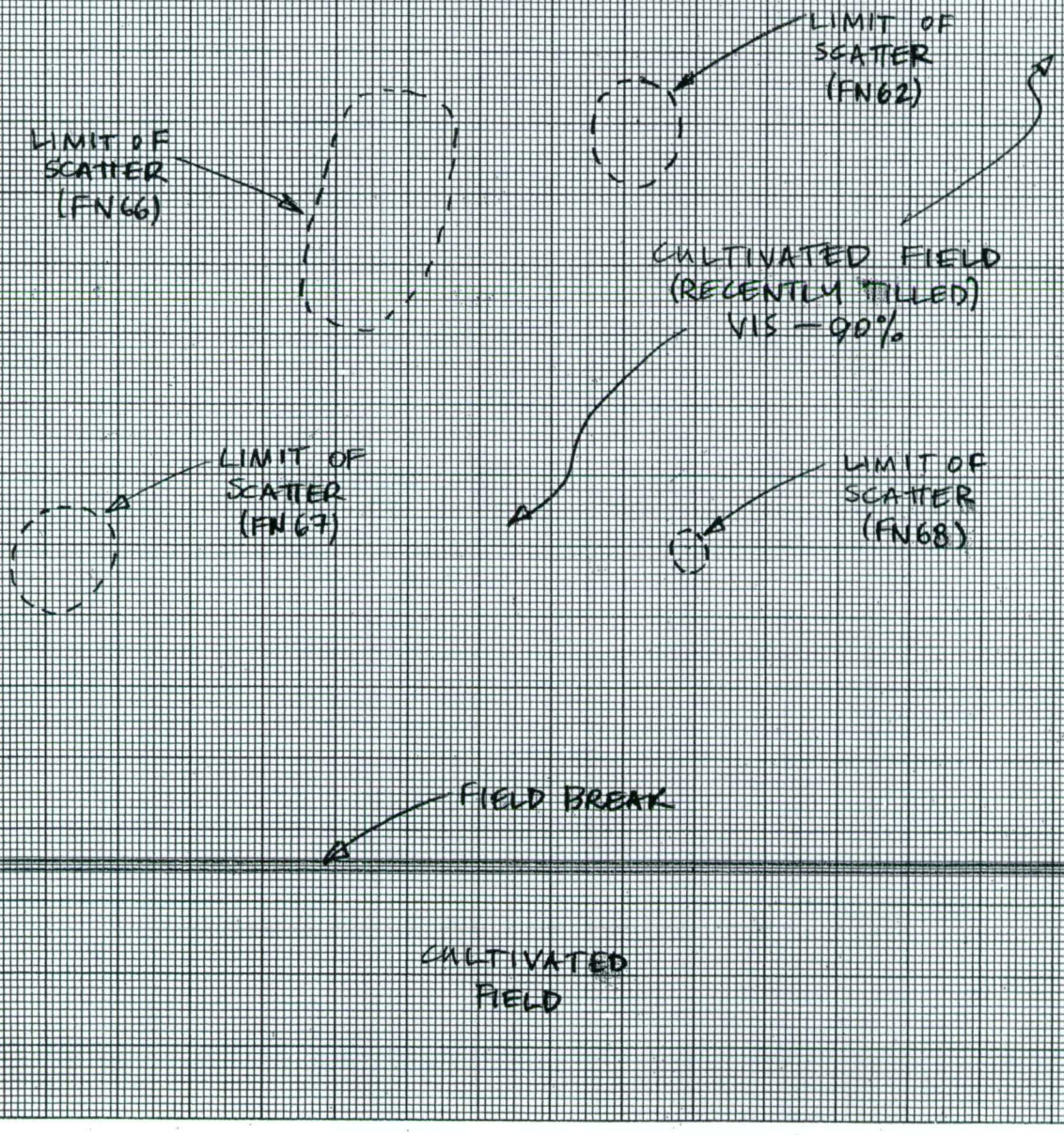
Description: The prehistoric artifact assemblage was non-diagnostic. Historic ceramics recovered all appear to be 20th century manufacture. Additionally, several pieces of container glass recovered include threaded neck sections.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N

46 1510
K&E 10 X 10 TO THE CENTIMETER 18 X 25 CM.
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LEN SMALL SURVEY
FIELD NOS. 62, 66, 67, AND 68
06 AND 07 APRIL 04
ALBERTSON





ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 67
State Site No.: 598
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:**	SWNENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**		**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106464 **UTM East:** 293720 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 650
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 10
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: side scraper (1); endscraper (1); utilized debitage (1); core (1); core fragment (1); secondary flake (1); flake fragment (3); shatter (1)

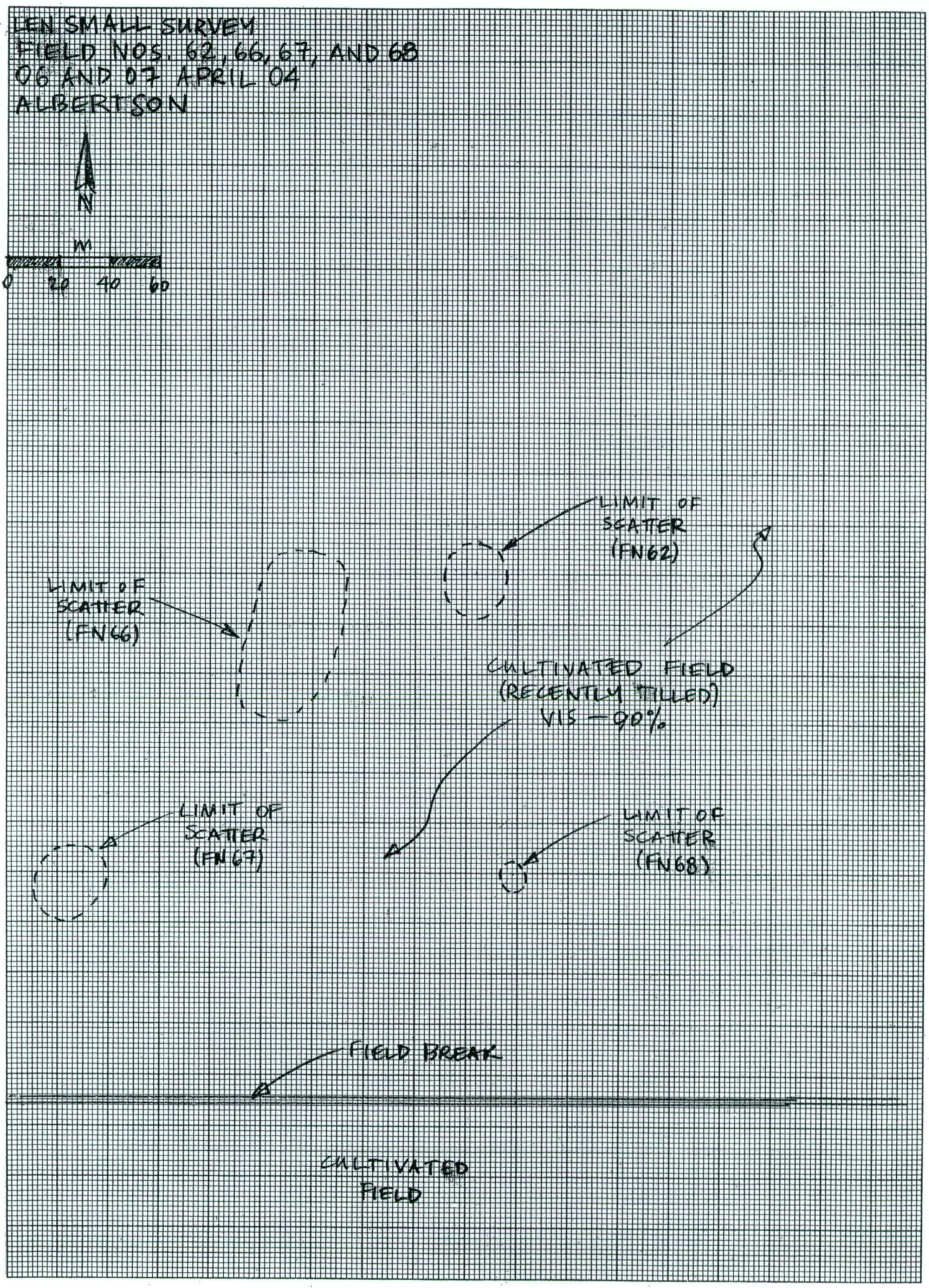
TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diagnostic.

Surveyor: E. Albertson
Institution: PCI
Survey Date: 04/07/2004
Curation Facility: ISM
Site Report by: E. Albertson
Institution: PCI
Date: 07/14/2004
IHPA Log No.:
IHPA First Sur. Doc. No.:
Compliance Status:
NRHP Listing: N

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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 68 **State Site No.:** 599
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** SENENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106451 **UTM East:** 293899 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 705
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

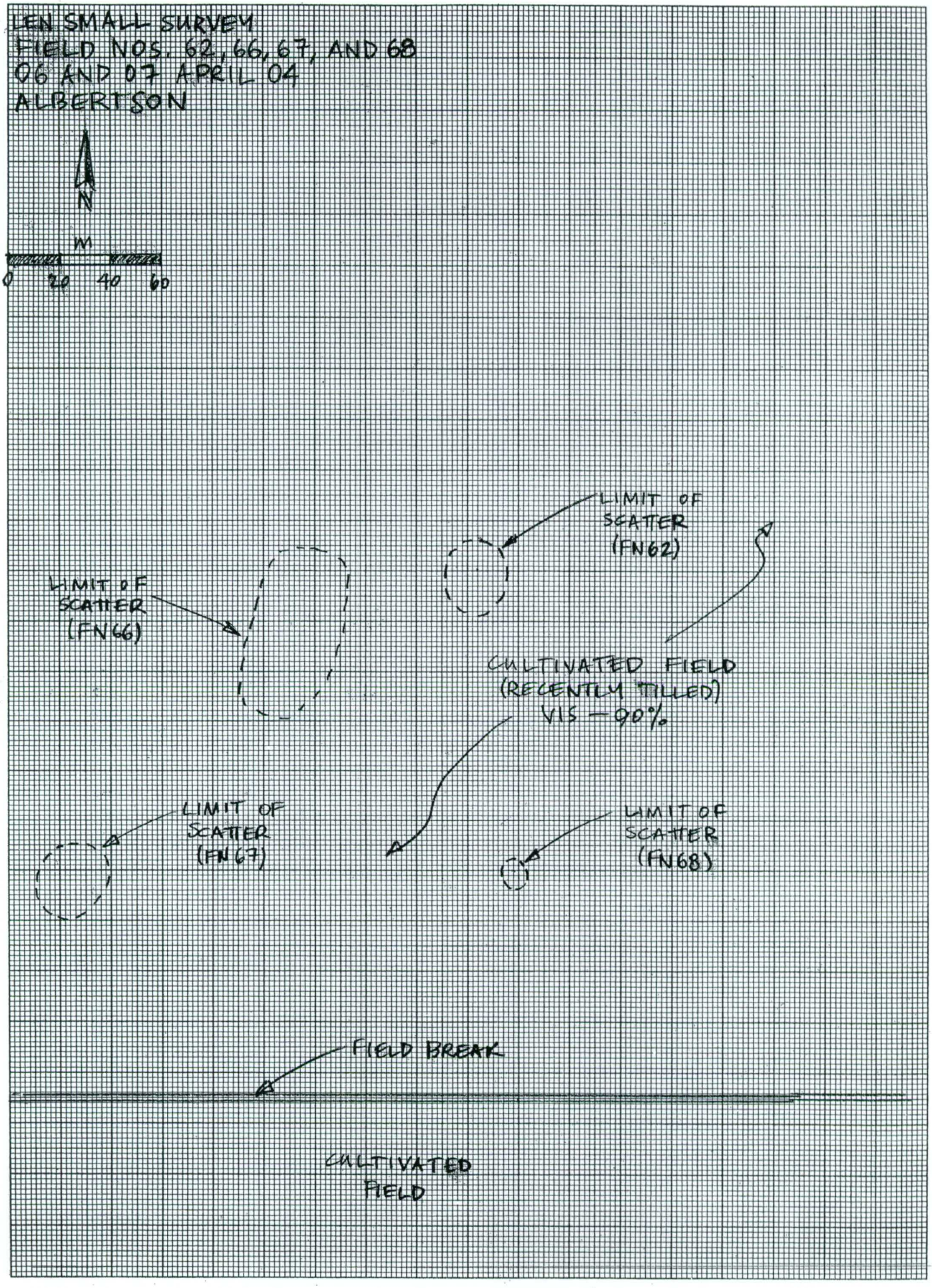
Number of Prehistoric Artifacts (count or estimate): 5 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k (1); biface (1); secondary flake (1); flake fragment (2)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:** Y	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered pp/k is untyped although closely resembles a number of Late Archaic forms.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 69
State Site No.: 600
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** SENENW	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106404 **UTM East:** 294073 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 1349
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

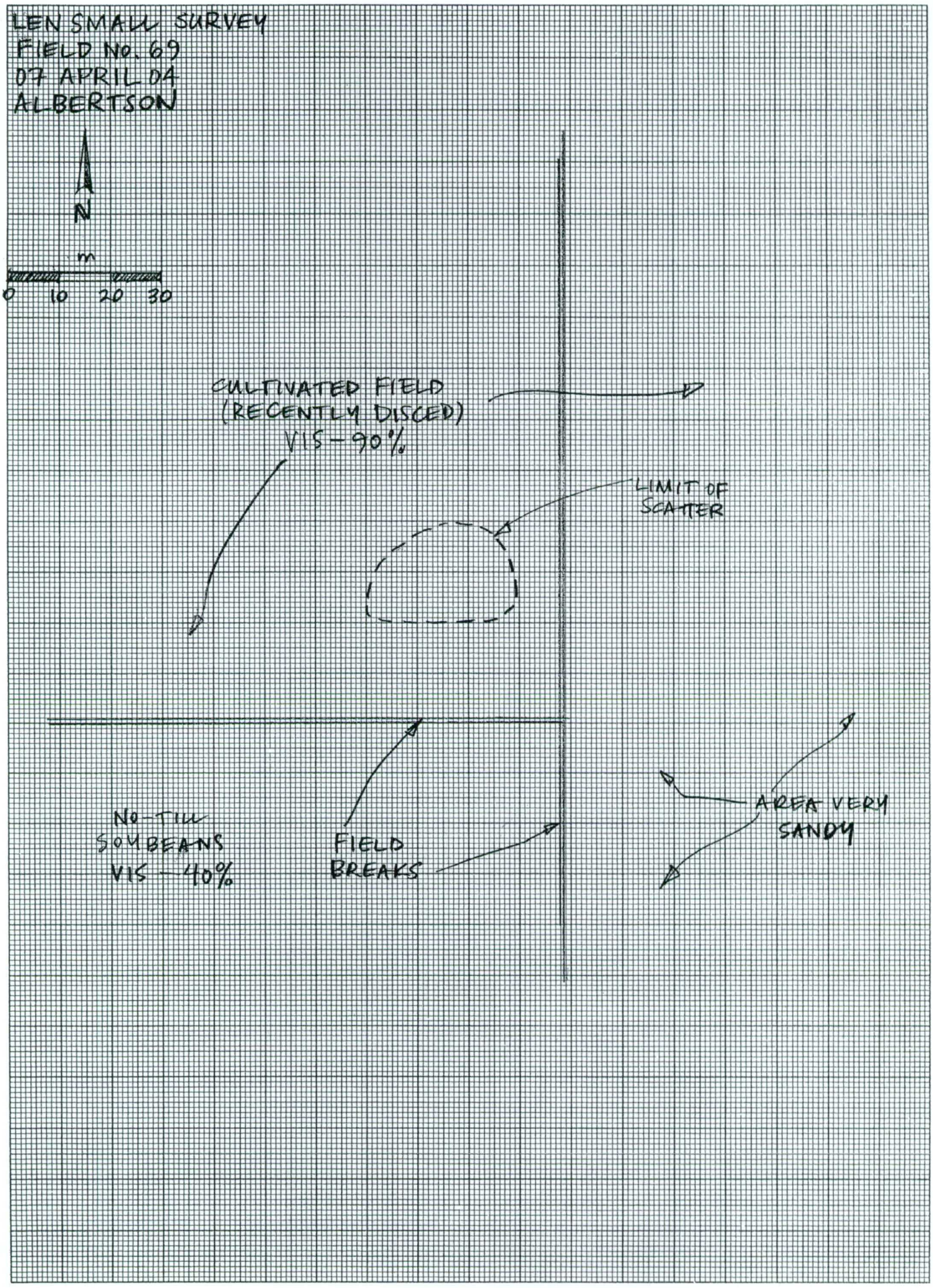
Number of Prehistoric Artifacts (count or estimate): 11
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: biface (1); utilized flake (2); bifacial thinning flake (1); core trimming flake (1); tertiary flake (2); flake fragment (4)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact assemblage was non-diaagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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K&E

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 70
State Site No.: 601
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SWNWNE	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106476 **UTM East:** 294288 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a cultivated field, recently tilled prior to survey. Lies along the remodeled terrace edge above Grand Lake to the southeast.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 116
Ground Cover (List up to 3): Bare
Visibility (%): 90
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

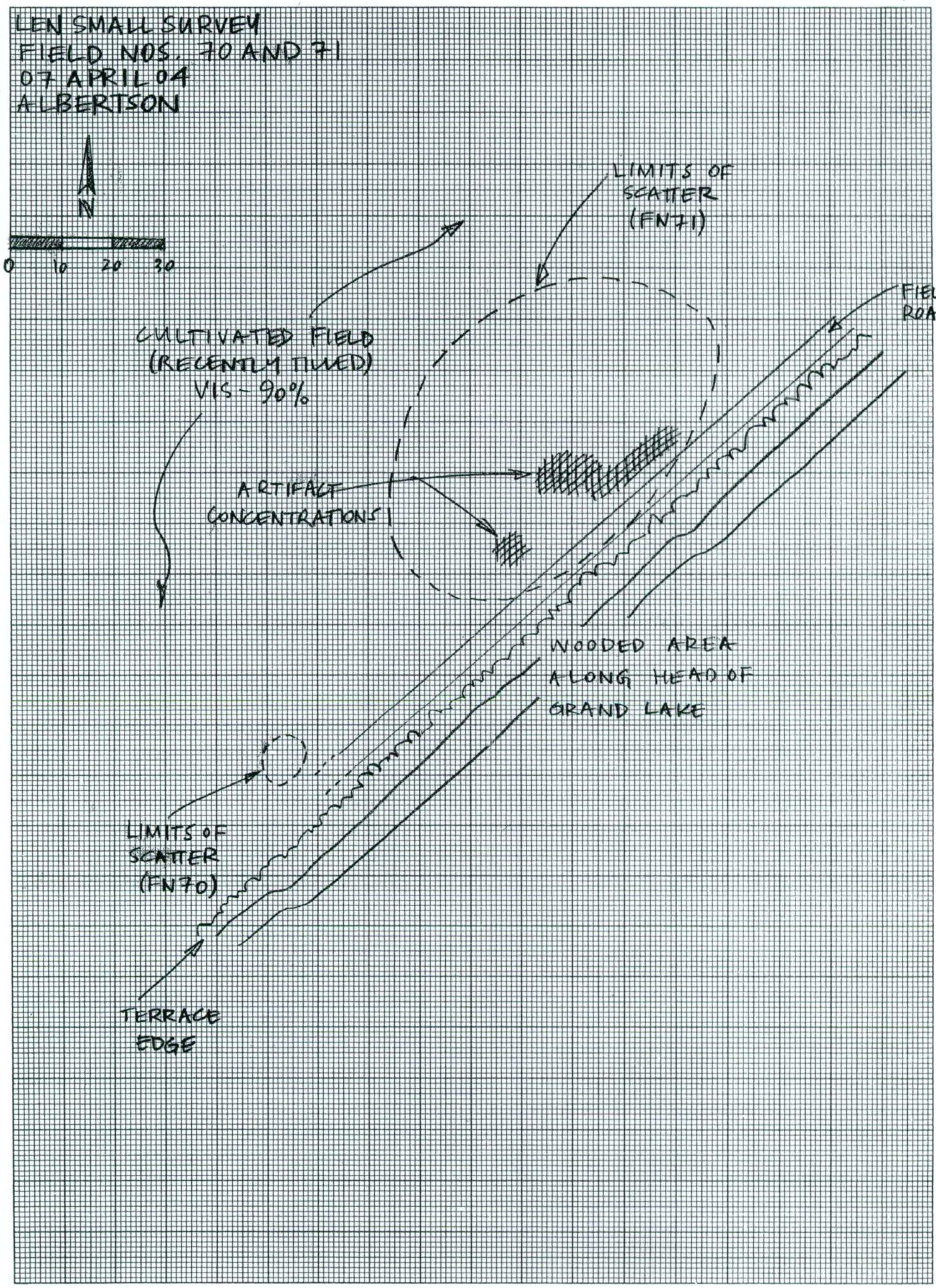
Number of Prehistoric Artifacts (count or estimate): 4
Number of Historic Artifacts (count or estimate): 0
Prehistoric Diagnostic Artrifacts: N
Historic Diagnostic Artifacts: N
Prehistoric Surface Features: N
Historic Surface Features: N
Description: spokeshave (1); utilized flake (1); tertiary flake (2)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered artifact artifact assemblage was non-diagnostic.

Surveyor: E. Albertson
Institution: PCI
Survey Date: 04/07/2004
Curation Facility: ISM
Site Report by: E. Albertson
Institution: PCI
Date: 07/14/2004
IHPA Log No.:
IHPA First Sur. Doc. No.:
Compliance Status:
NRHP Listing: N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander
Site Name:
Revisit: N
Field Number: 71
State Site No.: 602
Quadrangle (7.5'): Cache
Date Recorded: 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align SE	**1/4s:** SENWNE	**Section:** 34	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106550 **UTM East:** 294342 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain
Elevation (in meters): 98
Nearest Water Supply: Grand Lake
Drainage: Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a cultivated field, recently tilled prior to survey. Lies along the remodeled terrace edge above Grand Lake to the southeast. Several artifact concentrations were observed along a series of small rises nearest the Lake.

SURVEY

Project Name: Len Small Floodway Survey
Site Area (square meters): 3885
Ground Cover (List up to 3): Bare
Visibility (%): 80
Survey Methods (List up to 2): Pedestrian
Standing Structures: N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

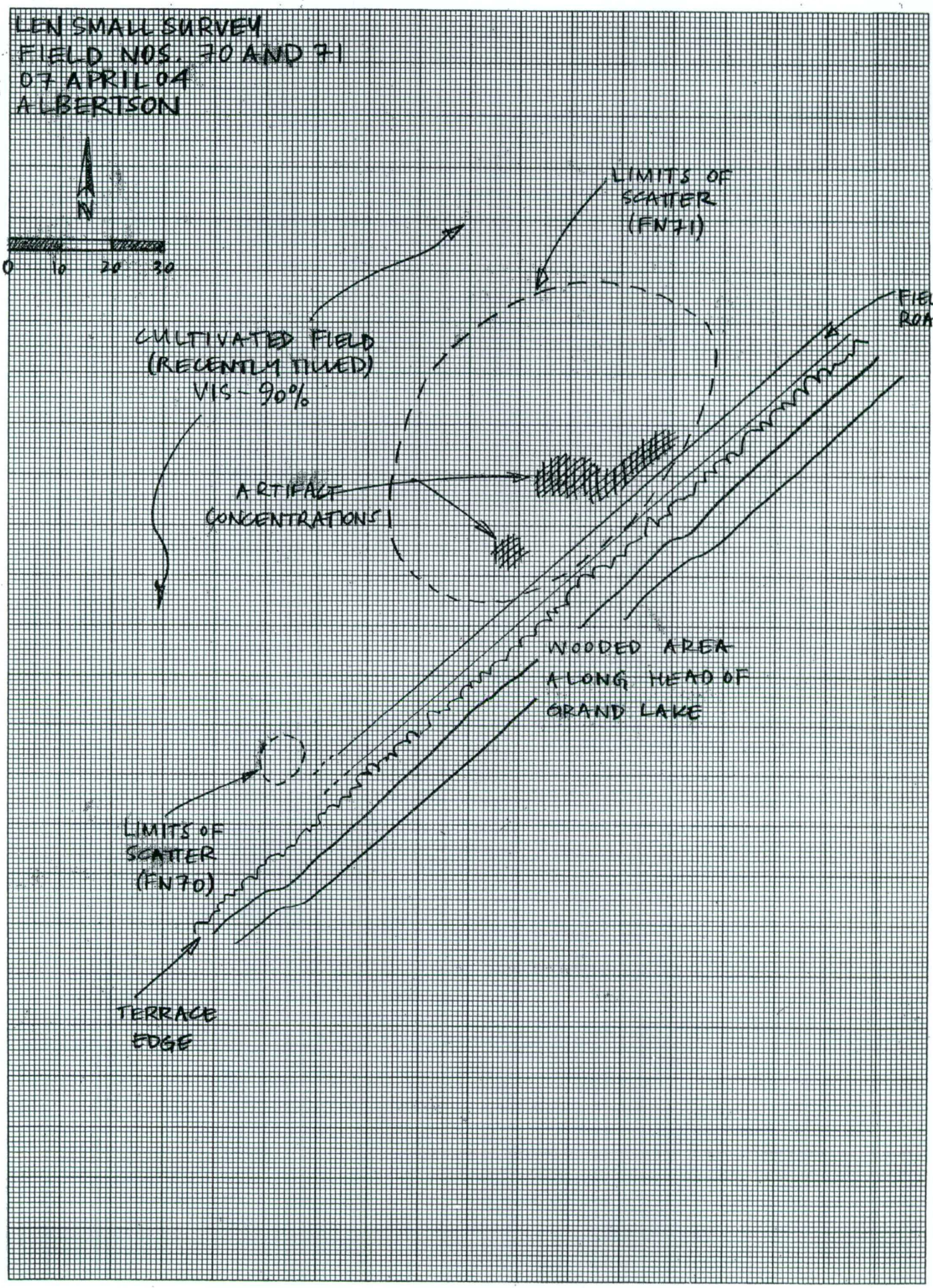
Number of Prehistoric Artifacts (count or estimate): 106
Number of Historic Artifacts (count or estimate): 8
Prehistoric Diagnostic Artrifacts: Y
Historic Diagnostic Artifacts: Y
Prehistoric Surface Features: N
Historic Surface Features: N
Description: pp/k frag(4);biface/frag(14);celt frag(1);groundstone(1);retouched piece(17);utilized flk(6);core frag(3);bifacial thin flk (2);primary flk(2);secondary flk(8);tertiary flk(11);flk frag(29);shatter(3);stoneware(3);whiteware(1);container glass(3)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:** Y	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:** Y	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:** Y	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The pp/ks recovered are all expanding stemmed Woodland forms. The historic temporal affiliation is based on recovered amethyst glass (ca. 1880-1920). A historic (residential) structure is indicated on the quadrangle sheet immediately north of the site.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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K•E

ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 72 **State Site No.:** 603
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	SE	**1/4s:** NENWNE	**Section:** 34	**Township:** 16 S	**Range:** 2
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align		**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4106688 **UTM East:** 294373 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located along a remodeled terrace or old natural levee above Grand Lake to the east. Occupies a cultivated field, recently tilled prior to survey.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1292
Ground Cover (List up to 3): Bare **Visibility (%):** 90
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

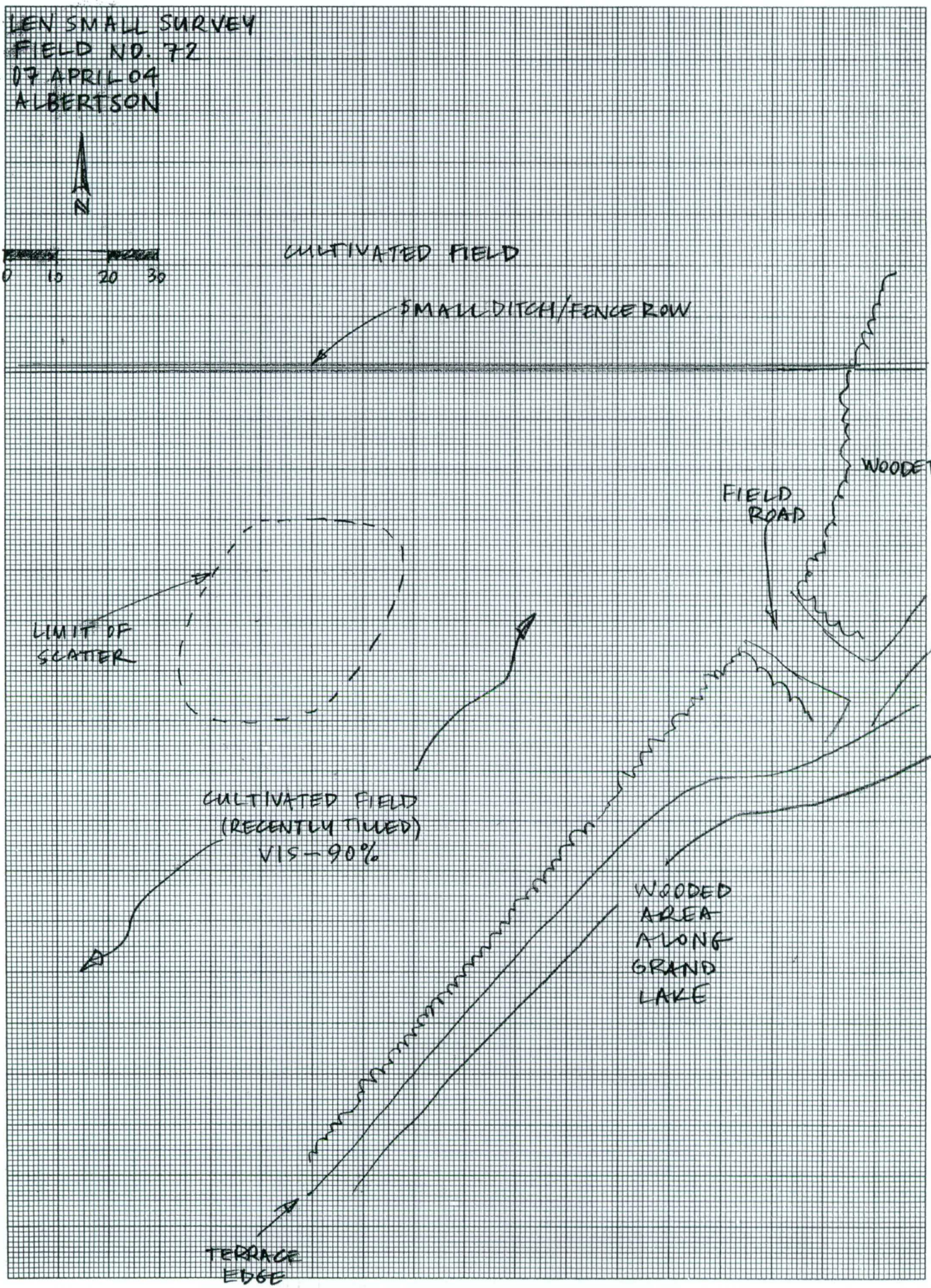
Number of Prehistoric Artifacts (count or estimate): 22 **Number of Historic Artifacts (count or estimate):** 1
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface fragment (1); endscraper (1); side scraper (2); spokeshave (1); untyped scraper (1); hammerstone fragment (1); tertiary flake (3); flake fragment (12); container glass (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):** Y	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The prehistoric assemblage was non-diagnostic. The solarization evident on the only historic artifact recovered is indicative of a manufacture range between approximately 1880 and 1920.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/07/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/14/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 78 **State Site No.:** 604
Quadrangle (7.5'): Thebes SW, MO **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	**1/4s:**	**Section:** 0	**Township:** 16 S	**Range:** 1
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4110778 **UTM East:** 287660 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 101
Nearest Water Supply: Mississippi River **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. It is found about 20 m northeast of Miller City Road, east of where the road meets the Mississippi River levee.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1301
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

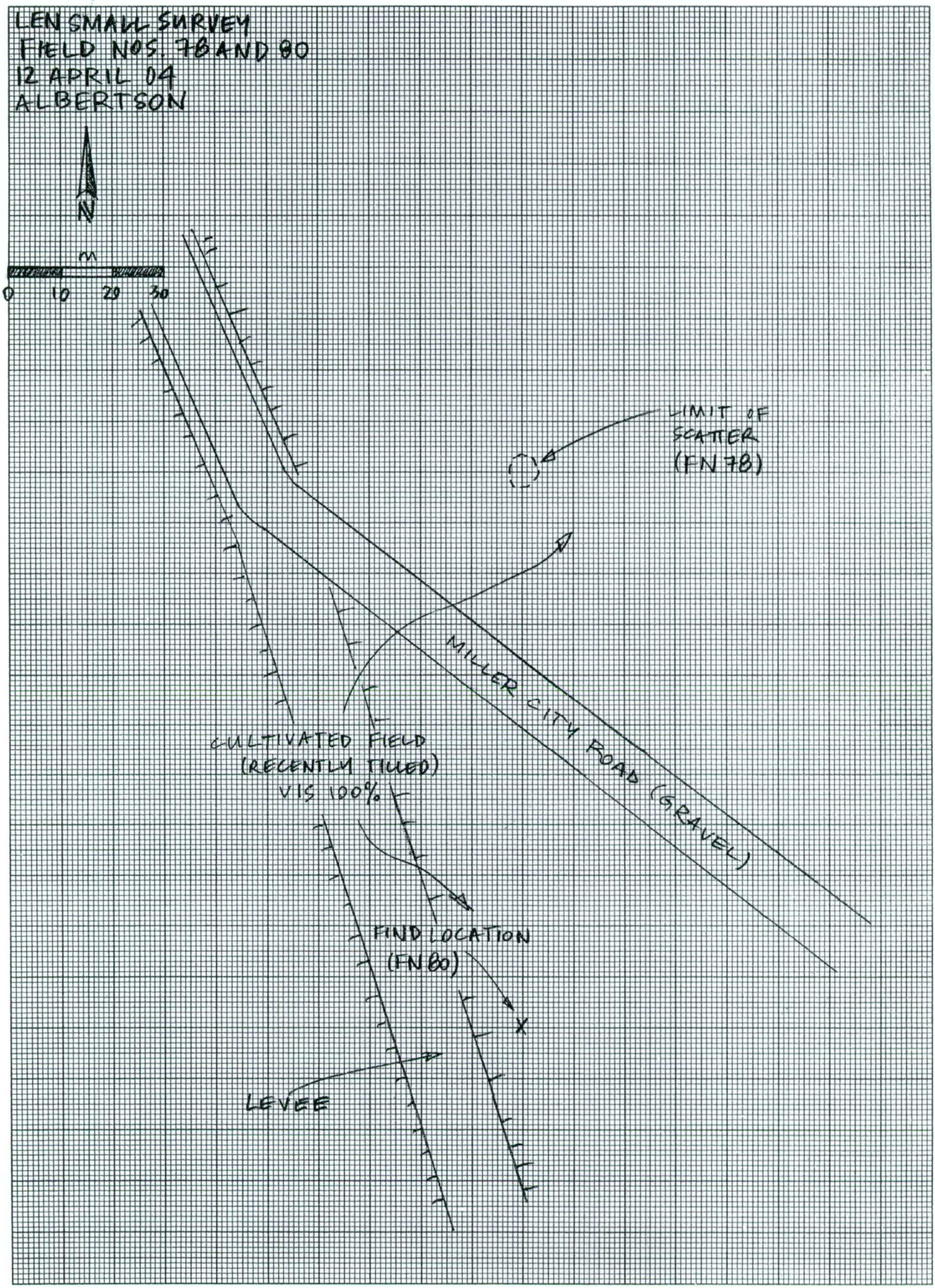
Number of Prehistoric Artifacts (count or estimate): 3 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: endscraper (1); tertiary flake (1); flake fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The recovered assemblage was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/12/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/15/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 79 **State Site No.:** 605
Quadrangle (7.5'): Thebes SW, MO **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	**1/4s:**	**Section:** 0	**Township:** 16 S	**Range:** 1
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4110321 **UTM East:** 288121 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 101
Nearest Water Supply: Mississippi River **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. It is found approximately 10 m east of Miller City Road.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 601
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

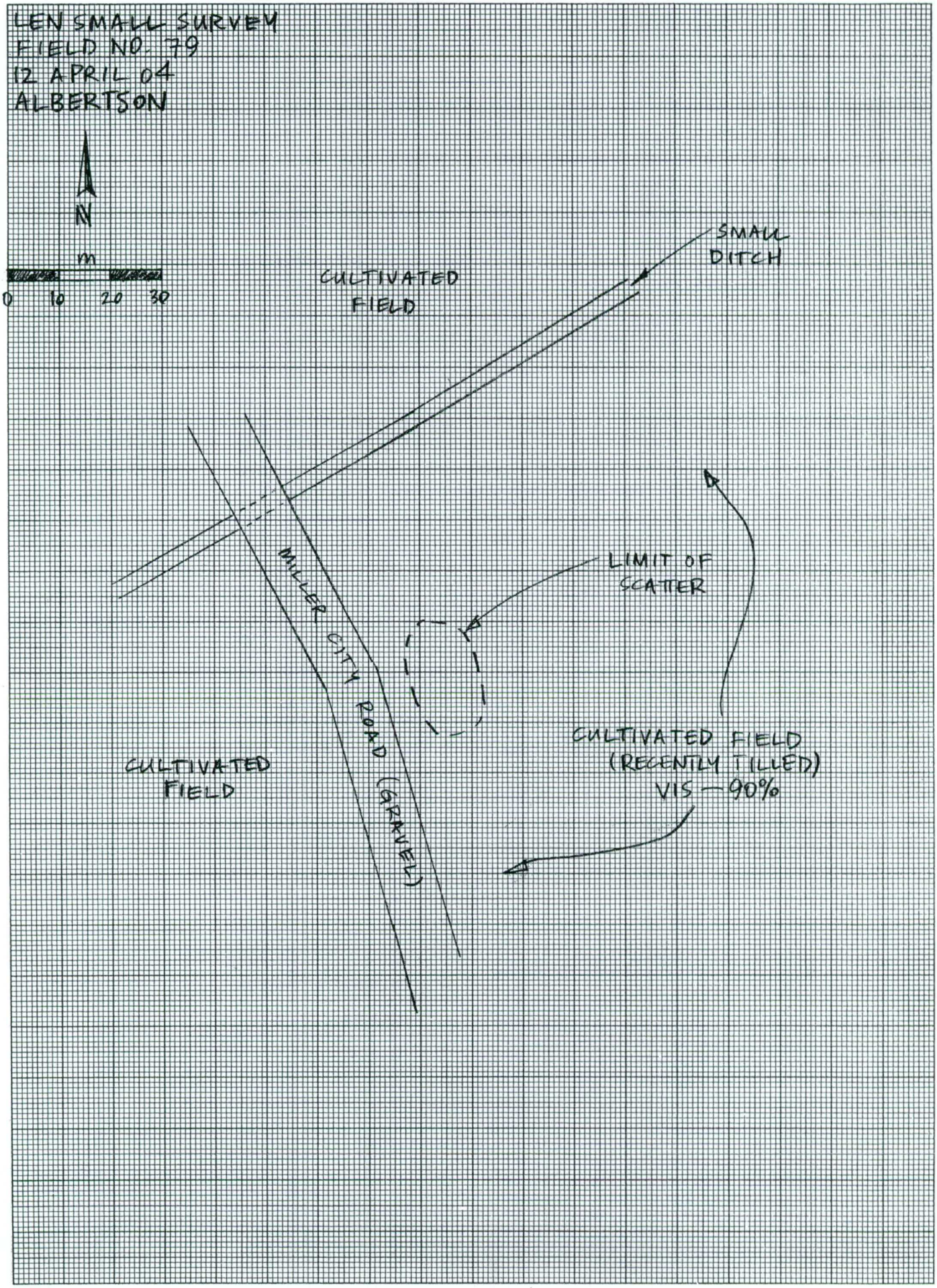
MATERIAL OBSERVED

Number of Prehistoric Artifacts (count or estimate): 10 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: untyped scraper; secondary flake (1); tertiary flake (2); flake fragment (6)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
Description:			**Post-War (1946-present):**

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/12/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/15/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



46 1510
10 X 10 TO THE CENTIMETER 18 X 25 CM.
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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 80 **State Site No.:** 606
Quadrangle (7.5'): Thebes SW, MO **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align	**1/4s:**	**Section:** 0	**Township:** 16 S	**Range:** 1
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4110674 **UTM East:** 287701 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 101
Nearest Water Supply: Mississippi River **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site lies in a broad, generally level section of Mississippi River floodplain. Occupies a cultivated field, recently tilled prior to survey. It is adjacent to the Mississippi River Levee a short distance south of where Miller City Rd and the levee meet.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 0
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Isolated Find

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

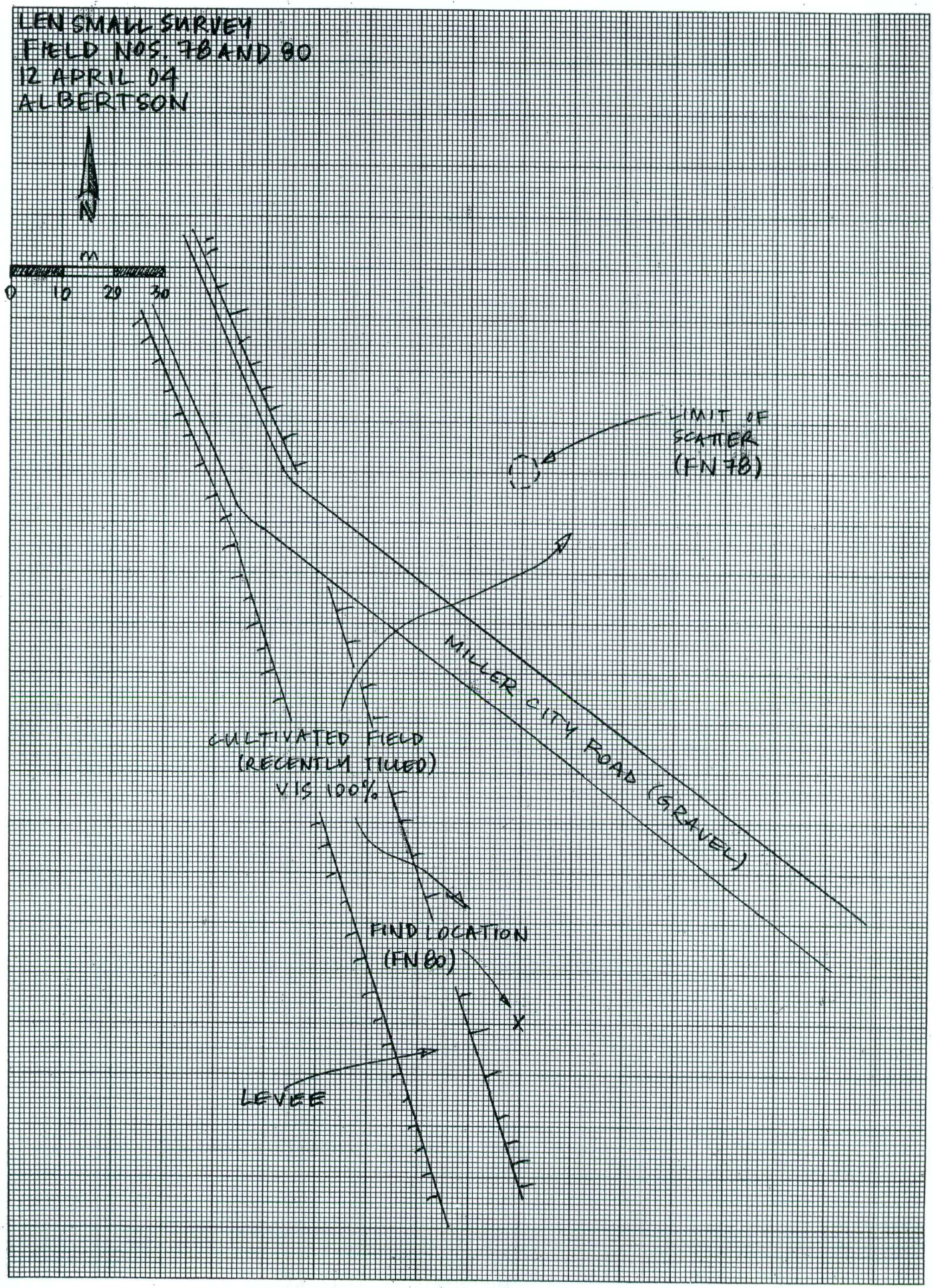
Number of Prehistoric Artifacts (count or estimate): 1 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: biface fragment (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown: Y	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The specimen recovered was non-diagnostic.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/12/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/15/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 81 **State Site No.:** 607
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align NE	**1/4s:** NWSENW	**Section:** 26	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4107724 **UTM East:** 295356 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a cultivated field, recently tilled prior to survey. It lies along the north bank of Grand Lake along the edge of a remodeled terrace. The site is found at the southwest corner of the field, northeast of a small gravel field road.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 1439
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

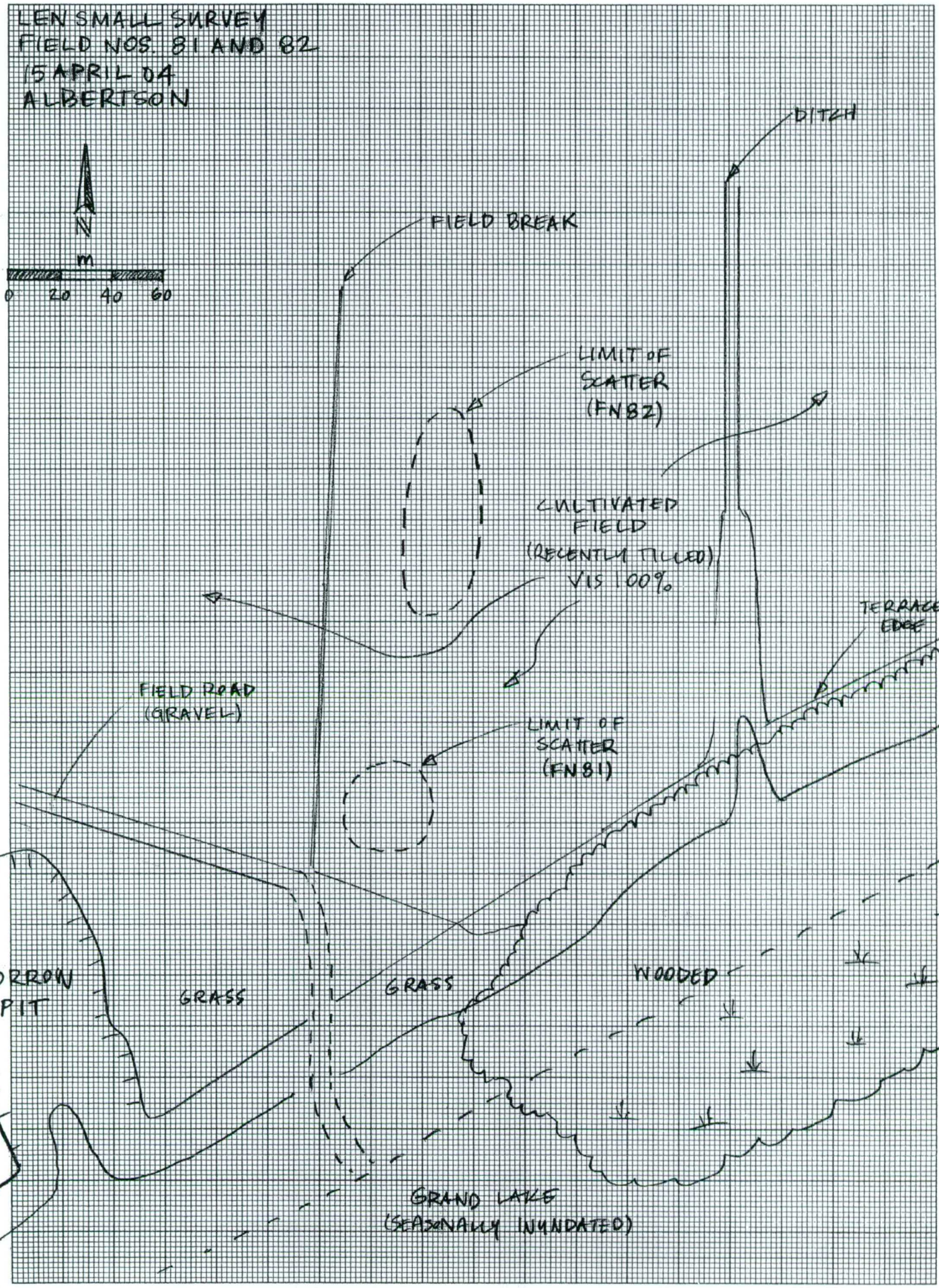
Number of Prehistoric Artifacts (count or estimate): 0 **Number of Historic Artifacts (count or estimate):** 18
Prehistoric Diagnostic Artrifacts: N **Historic Diagnostic Artifacts:** Y
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: ceramic doorknob (1); stoneware (8); whiteware (2); container glass (5); milk glass canning seal lid (1); flat glass (1)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:**	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):** Y
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):** Y
			Post-War (1946-present):

Description: The temporal affiliation is based on the presence of amethyst glass (ca. 1880-1920). Additionally, a residential structure is indicated at this location on the quadrangle sheet.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/15/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/15/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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ILLINOIS ARCHAEOLOGICAL SITE RECORDING FORM

County: Alexander **Site Name:** **Revisit:** N
Field Number: 82 **State Site No.:** 608
Quadrangle (7.5'): Cache **Date Recorded:** 2004.08.19

LEGAL DESCRIPTION (to quarter quarter quarter section)

Align NE	**1/4s:** NWSENW	**Section:** 26	**Township:** 16 S	**Range:** 2
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0
Align	**1/4s:**	**Section:** 0	**Township:** 0	**Range:** 0

UTM Coordinates (by ISM): **UTM Zone:** 16 **UTM North:** 4107850 **UTM East:** 295396 **NAD27**

Ownership: Private

ENVIRONMENT

Topography: Floodplain **Elevation (in meters):** 98
Nearest Water Supply: Grand Lake **Drainage:** Mississippi 10
Soil Association: Lawson-Sawmill-Darwin
Description: Site is located in a cultivated field, recently tilled prior to survey. It lies along a low ridge with a distinct swale to the east. It is a short distance north of Grand Lake.

SURVEY

Project Name: Len Small Floodway Survey **Site Area (square meters):** 3001
Ground Cover (List up to 3): Bare **Visibility (%):** 100
Survey Methods (List up to 2): Pedestrian **Standing Structures:** N
Site Type (List up to 2): Habitation

SITE CONDITION

Extent of Damage: Unknown
Main Cause of Damage: Agriculture

MATERIAL OBSERVED

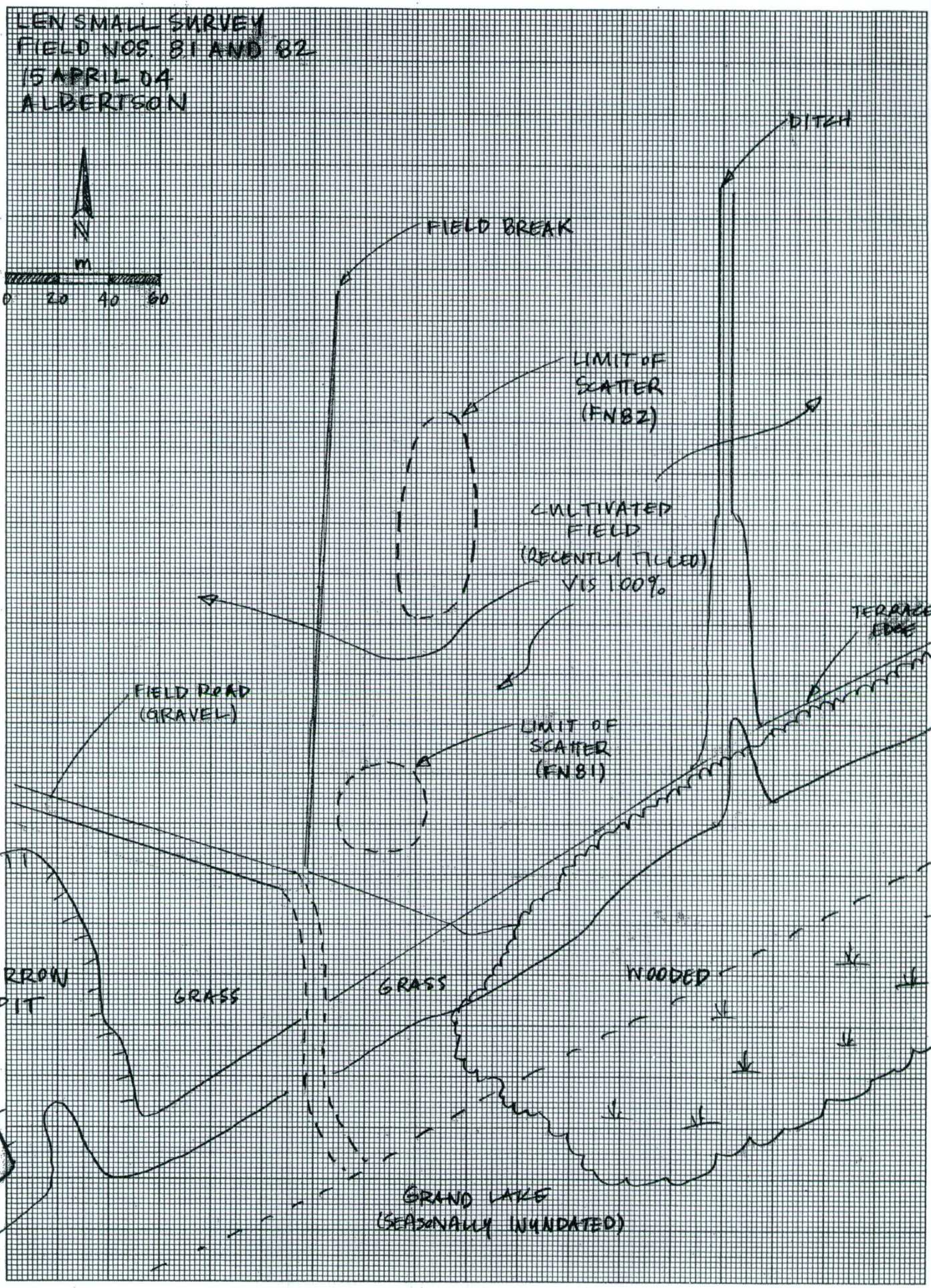
Number of Prehistoric Artifacts (count or estimate): 54 **Number of Historic Artifacts (count or estimate):** 0
Prehistoric Diagnostic Artrifacts: Y **Historic Diagnostic Artifacts:** N
Prehistoric Surface Features: N **Historic Surface Features:** N
Description: pp/k fragments (2); biface fragment (4); spokeshave (3); untyped scraper (6); utilized flake (1); primary flake (1); secondary flake (1); tertiary flake (6); flake fragment (30)

TEMPORAL AFFILIATION (check all that apply)

Prehistoric Unknown:	**Late Archaic:**	**Mississippian:**	**Colonial (1673-1780):**
Paleoindian:	**Woodland:** Y	**Upper Mississippian:**	**Pioneer (1781-1840):**
Archaic:	**Early Woodland:**	**Protohistoric:**	**Frontier (1841-1870):**
Early Archaic:	**Middle Woodland:**	**Historic Native American:**	**Early Industrial (1871-1900):**
Middle Archaic:	**Late Woodland:**	**Historic (generic):**	**Urban Industrial (1901-1945):**
			Post-War (1946-present):

Description: The pp/ks recovered are untyped but resemble several, expanding stemmed Woodland Period forms.

Surveyor: E. Albertson **Institution:** PCI **Survey Date:** 04/15/2004 **Curation Facility:** ISM
Site Report by: E. Albertson **Institution:** PCI **Date:** 07/15/2004
IHPA Log No.: **IHPA First Sur. Doc. No.:**
Compliance Status: **NRHP Listing:** N



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APPENDIX D
SCOPE OF WORK

December 23, 2003

Scope of Work
Delivery Order No. 0022
Survey of Designated Portions of MR&T Commerce to Birds-Point
(Len Small)
Alexander County, Illinois
U. S. Army Corps of Engineers, St. Louis District
Panamerican Consulotants
Contract No. DACW66-01-D-0003

Intensive Survey with limited Testing (shovel test), Surface Site Evaluation, and preliminary Geomorphologic Study, within designated portions of a Len Small Levee Floodway across Dogtooth Bend Peninsula, Alexander County, Illinois.

1. Project. As part of the Len Small Floodway study, the St. Louis District is analyzing the feasibility of constructing an overflow floodway traversing the Dogtooth Bend peninsula. Dogtooth Bend is a large meander loop of the Mississippi River located between River Mile 13 and 34.5 upstream from the confluence of the Ohio and Mississippi Rivers at Cairo, Illinois. During high water, such as in 1993, Mississippi River floodwater flowed across the neck of the meander. The project is a study of how to control this flooding (Map 1.a). The northern third of the Bend is high ground, including terrace edge to the north and a terrace remnant to south (Map 1.b). The low area between the terrace edge and remnant forms a natural floodway. The proposed Len Small floodway would include the natural floodway and a narrow portion of the southern terrace remnant.

2. Background. A file search for previous surveys and reported sites was obtained from the Illinois State Museum (ISM) in 2001 (Maps 2.a., 2.b., 2.c.). Subsequent update was obtained in November 2003. About one-fourth of the proposed Len Small floodway has been systematically surveyed by state universities to located archaeological sites; over 90 sites have been identified thus far and a similar density is expected in the remaining three-fourths of the Len Small project area. The largest study, conducted from 1993 to 1995 by the University of Southern Illinois-Carbondale (SIU-C), involved a systematic survey of about 20% of the northern one-third of the Bend where the land is higher and which was more habitable prehistorically (Stephens 1995). The initial survey fortuitously was completed just prior to the Flood of 1993. The area was then revisited to assess archaeological site damage from flooding and these results may be used in evaluating the condition of sites in the Len Small impact area. The study found archaeological sites clustered along the northern terrace edge (a prominent ridge) at the north end of the Bend, as well as along the south and west edges of the southern terrace remnant. The proposed Len Small floodway as presently envisioned will include the natural floodway and avoid most known sites on the high ground to the north and south, especially the Dog Tooth Bend Mounds NRHP site and its satellite sites.

The Dogtooth Bend report (Stephens 1995) contains environmental setting (climate, geomorphology, physiography), prehistoric and historic cultural sequence, individual site descriptions (location, size, temporal period, condition, research potential, etc.) and a summary of the survey results. The work undertaken under this delivery order should build on/add to that previously conducted by the SIU-C. NOTE: Because the Dogtooth Bend report (Stephens 1995) uses SIUC numbers throughout rather than standard ISM numbers, tables converting the ISM numbers to SIU-C and visa versa shall be included in the contractors reports.

3. General. Work to be undertaken under this delivery order consists of intensive survey and limited geomorphological testing, site revisit, rough site delineation, shovel testing, artifact analysis and summary, draft and final reports of results for the proposed Len Small floodway levee, Alexander County, Illinois, U. S. Army Corps of Engineers, St. Louis District. This is the Illinois portion of the larger Mississippi River & Tributaries (MR&T) Commerce to Birds-Point Levee project also located in Scott County, Missouri.

The Contracting Officer's Representative (COR) for this delivery order shall be Mr. Jimmy McNeil, Memphis District, who is responsible for contract administration. The Project Archaeologist shall be Ms. Suzanne E. Harris, St. Louis District, who is responsible for all technical aspects of the delivery order, including fieldwork and results. All information sent to the COR should be copied to the Project Archaeologist, and visa versa.

4. Specific Task.

a. The contractor shall survey the designated unsurveyed areas, which are generally based on quarter-quarter sections (Maps 4.a., 4.b.). There are approximately1334 total acres to survey (Table 4.a.). Contractor is not required to resurvey areas previously surveyed by SIU-C except to revisit known sites designated below.

b. The contractor shall revisit the designated sites and conduct a site surface evaluation to determine the sites' integrity and preliminary significance based on research potential and condition. Minor subsurface testing/shovel testing may be required. There are 28 sites, totaling about 41.5 acres/16.8 hectares, to revisit (Table 4.b.1), below. Two additional sites (11AX427, 11AX429) may extend into the survey area*. Site legal locations and UTM coordinates for the sites may be found in Table 4.b.2 and Stephens 1995: Appendix A, p. 219. Site significance and condition/integrity should be compared to those recorded by SIU-C in 1993 (Table 4.b.3) and any changes should be noted for each site.

Table 4.b.1 Archaeological sites to be revisited

11AX 79	361	369	380	418	425
80	362	375	410	419	426
81	363	376	411	420	437
341	364	377	412	422	*427
342	368	379	417	423	*428

c. Survey areas and revisit sites have been selected based on Government obtained rights-of-entry, not a probability sample. The Contractor will not submit a sampling design. However, to the extent possible, the contractor shall estimate the probability of archaeological sites existing elsewhere in the proposed floodway, but outside the designated survey areas, paying particular attention to sand ridges and the natural floodway (low ground).

d. The contractor shall conduct preliminary geomorphologic survey to determine probability of presence of significant subsurface cultural resources, their likely location and nature. Geomorphological sampling shall be limited to the survey areas designated. No palynological samples shall be required. The Contractor shall utilize shovel tests, hand held soil corer and/or hand auger with 6/9" bucket and/or a motorized soil corer or back hoe as appropriate, to insure adequate depth and penetration of soils in the collection of data required. Auguring should be at 50 feet intervals. All borings should be refilled. Although limited geological field observations and testing will be necessary to obtain data, it is not anticipated that extensive subsurface testing will be required. The Contractor shall discuss type, location and size of geomorphic excavations with each landowner prior to work

e. Areas for which right-of-entry has been obtained, designated survey areas and revisit sites are enclosed on attached maps.

f. A listing of areas to be surveyed and recorded sites to be revisited and acreages are attached.

g. When a site is located, its rough boundaries will be determined and plotted on appropriate maps. The Contractor is responsible for obtaining GPS coordinates for all archaeological sites, both revisited and newly recorded, utilizing USCG/DGPS (United States Coast Guard/Differential Global Positioning System) to provide positional accuracy of 3 m (10 feet) or less. Coordinates shall be provided in both UTM and latitude systems.

h. Regional Archaeologists. The contractor is encouraged to contact SIU-C for any additional information they may have concerning archaeological resources in the Dogtooth Bend Project area.

i. State of Illinois Guidelines. The field investigations and formal report shall meet guidelines in the Illinois State Historic Preservation Office Guidelines for Archaeological Reconnaissance Surveys/Reports.

5. Right-of-Entry. The land in the contract area is NOT Federally owned. The St. Louis District has obtained Right-of-entry (ROE) from willing landowners willing to permit fieldwork on their property (Map 5.a.). Copies of the ROE-s will be provided and should be carried in the field. These ROE's are written to expire June 1, 2003. Fieldwork therefore shall only be conducted in designated areas. At least one week prior to beginning field work, the Contractor shall notify Ms. Suzanne E. Harris, Project

Archaeologist, St. Louis District Office at(314)331-8467, FAX (314)331-8806, E-Mail suzanne.e.harris@mvs02.usace.army.mil and Billy R. Arthur, Project Manager, St. Louis District Office at (314) 263-4998, FAX 314-263-4713, E-mail billy.r.arthur@mvs02.usace.army.mil. The Contractor shall arrange with each landowner an aggreable time to survey that landowner's property. In addition, one landowner, Mr. Darold Billings, has requested that no one enter his property after a heavy rain.

The Contractor shall obtain locations of all buried utility lines within the project corridor, near site locations, and avoid them during subsurface testing. Contractor shall obtain any required utility Rights of Entry.

6. Curation (C-4).. The Contractor shall provide for storage and retrieval facilities for all artifacts, specimens, records and other documents of the investigation performed under this delivery order prior to final deposition of material. Since artifacts recovered by the project are the property of the landowner, the Contractor will request that the landowner/tenants permanently donate artifacts collected during the investigations to an appropriate repository. Contractor will emphasize to landowner/tenants that this is their decision. If landowner/tenant agrees to donate artifacts, the artifacts collected during the investigation shall be cleaned, permanently labeled, and catalogued according to the St. Louis District Curation Standards. If the landowner does not specify a repository, Contractor will be responsible for selecting a repository. Contractor will also arrange for and transmit paperwork transferring ownership from the landowner/tenant to the repository, and will transport the artifacts to the repository.

Since all records (field notes, photographs, reports) generated by the investigation are the property of the Corps, the contractor will prepare these for curation according to the St. Louis District Curation Standards. Corps may inspect records for compliance with Standards. Following acceptance of the draft report and inspection of the records, the records shall be curated at the Illinois State Museum (ISM). The contractor shall prepare the records for curation according to the St. Louis District Curation Checklist for Deposit of Archaeological Materials. At the time the records are given to the ISM, the Contractor shall obtain a receipt from the ISM for the records and forward a copy of the receipt to the Government.

If the landowner declines to donate them, the artifacts collected during survey shall be cleaned and catalogued. Diagnostic artifacts and other representative artifacts shall be photographed/scanned to provide a permanent record. The contractor shall analyze the collection by separating the artifacts into appropriate material categories, then subdividing as needed into smaller, functional and stylistic categories. Basic analytical studies include, but are not limited to those listed above. After the final report is completed, and has been reviewed and accepted by the St. Louis District, the artifacts shall be returned to the private land owners, unless otherwise directed.

7. Human Remains. Human remains are not anticipated at the project area, but in the event that they are encountered, the Contractor shall immediately stop work in the vicinity of the human remains and immediately notify the Project Manager, Mr. Billy

Arthur and Project Archaeologist, Ms. Suzanne E. Harris to determine the subsequent course of action under relevant state law. Since this is private, not federal, applicable state laws must be followed. If burials are discovered, the Contractor will notify the Government, the County Coroner and the Illinois SHPO pursuant to 20 Illinois Compiled Statutes (ILCS) 3440 and 17 Illinois Administrative Code (IAC) 4170.

8. General Report Requirements

a. Title Page.(C-5.3a.) The report shall follow St. Louis District Report Format Requirements and Title Page Format.

b Environmental Context (C-5.3 e) . This section shall build upon the Dogtooth Bend report (Stephens 1995).

c. Previous Research (C5.3f). This section shall build upon the Dogtooth Bend report (Stephens 1995).

d. Recommendations. (C-5.3k). A formal determination of eligibility is not a requirement of this work order. However, any resource which can be clearly evaluated as eligible or not eligible for NRHP listing should be evaluated and included in the report recommendations.

e. (C-5.3 n). The Contractor shall submit an Illinois Archaeological Survey Short Report (ASSR) form bound in the report after the NTIC form.

f. (C-5.7). Permanent site numbers issued by the ISM shall be used, however, comparable SIU-C numbers should also be listed in tables.

9. Submittals (C-6)

a. (C 6.1) Report Covers. The contractor shall use prepared report covers provided by the government for the final report and shall be responsible for binding the final report in these covers, using Plastic Spiral Binding.

b. (C-6.5). When cultural resources are located during contract activities, the Contractor shall supply the Illinois State Historic Preservation Office with completed site forms, survey report summary sheets ASSR, maps or other forms as appropriate. Blank ASSR forms may be obtained from the State Historic Preservation Office. The ISM prefers that site forms be filled out and submitted electronically. Copies of such completed forms and maps shall be submitted to the Contracting Officer within 30 calendar days of the end of fieldwork.

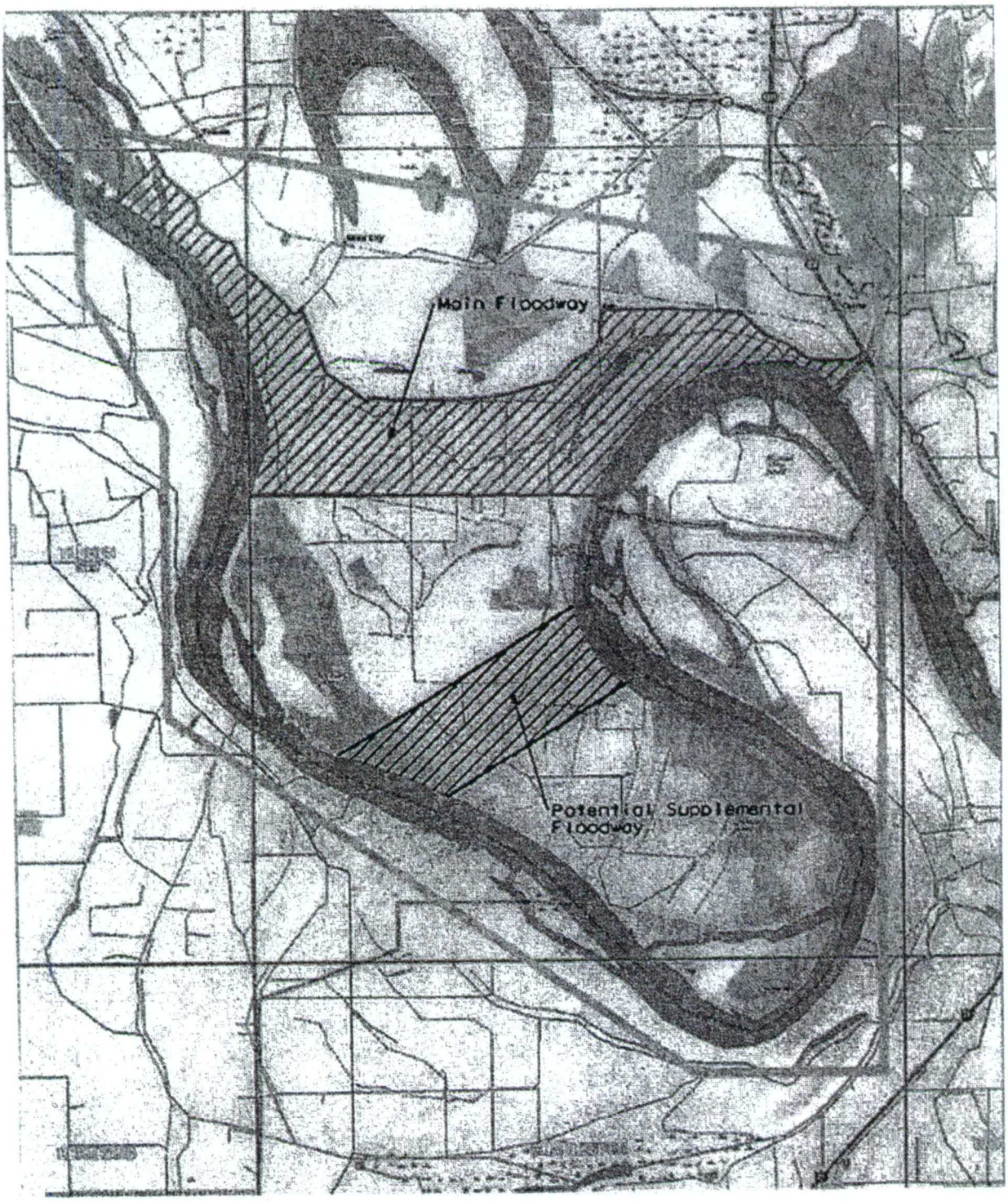
c. (C-6.6). Documentation. The Contractor shall submit detailed monthly progress reports to the COR and the Project Archaeologist by the 7th day of every month for the duration of the contract.

d. All work performed will be consistent with Section C of Contract No DACW66-01-D-0003 unless otherwise specified in this scope of work.

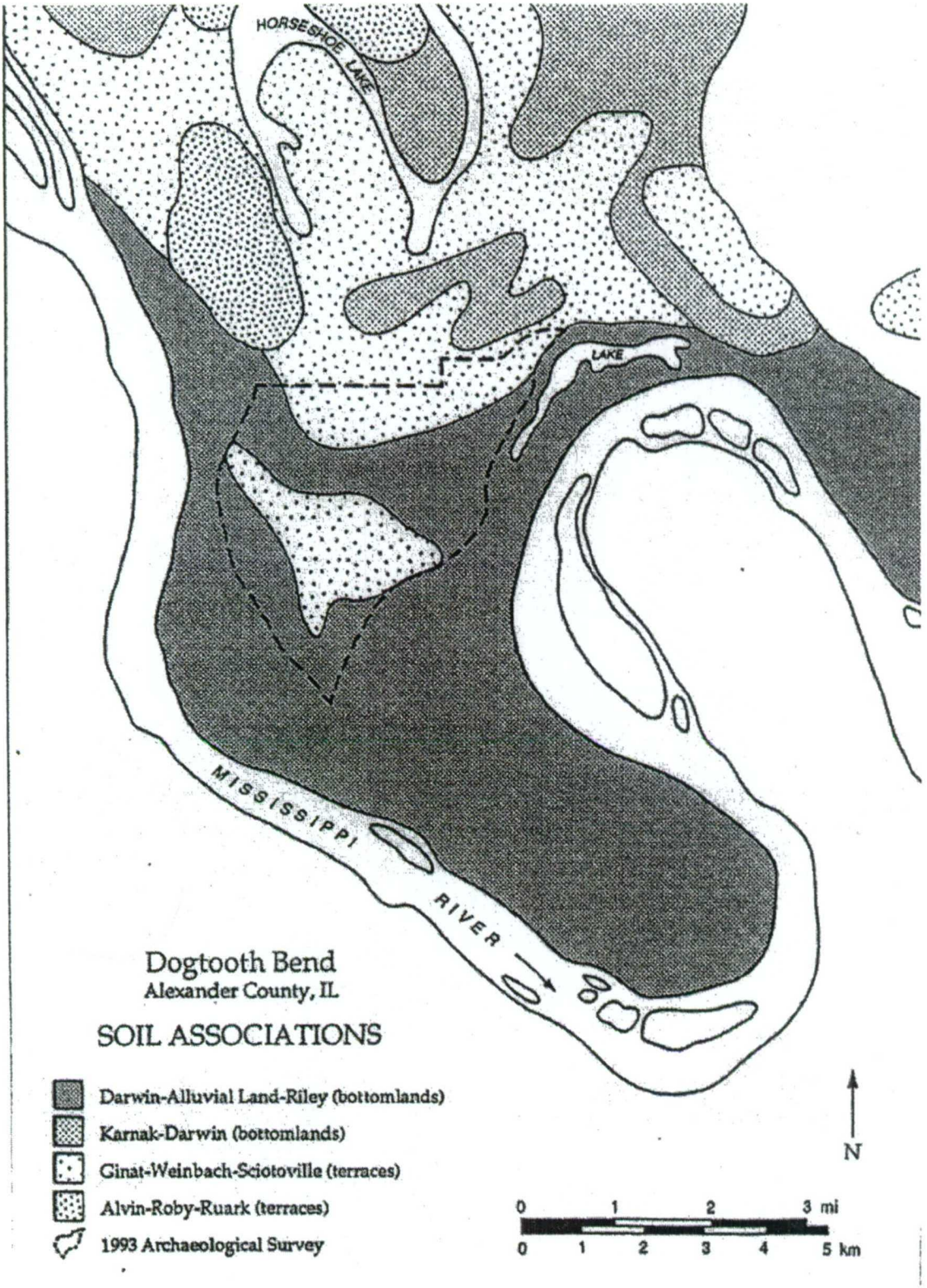
e. All fieldwork under this delivery order shall be completed by June 1, 2004. The delivery order shall expire on December 17, 2004. If required, the delivery order time may be extended (at the Governments discretion) on a day-to-day basis at no extra cost to the Government.

REFERENCE CITED

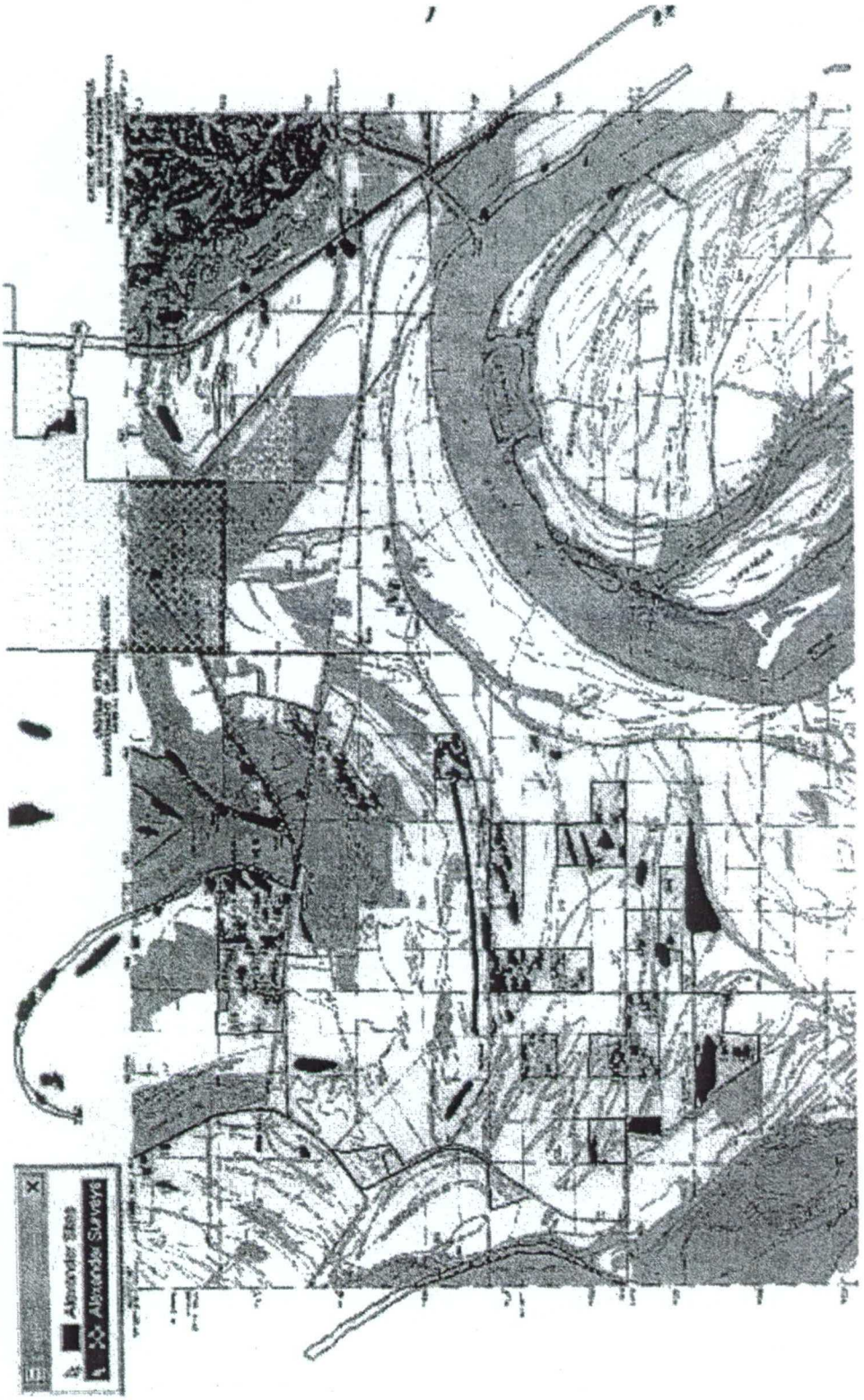
Stephens, Jeanette E.
An Archaeological Survey of Dogtooth Bend on the Mississippi River in Alexander County, Illinois. Prepared by Center for Archaeological Investigations, Brian M. Butler and Jeanette E. Stephens, Principal Investigators. St. Louis District Historic Properties Management Report No.45. September, 1995, St. Louis, Missouri.



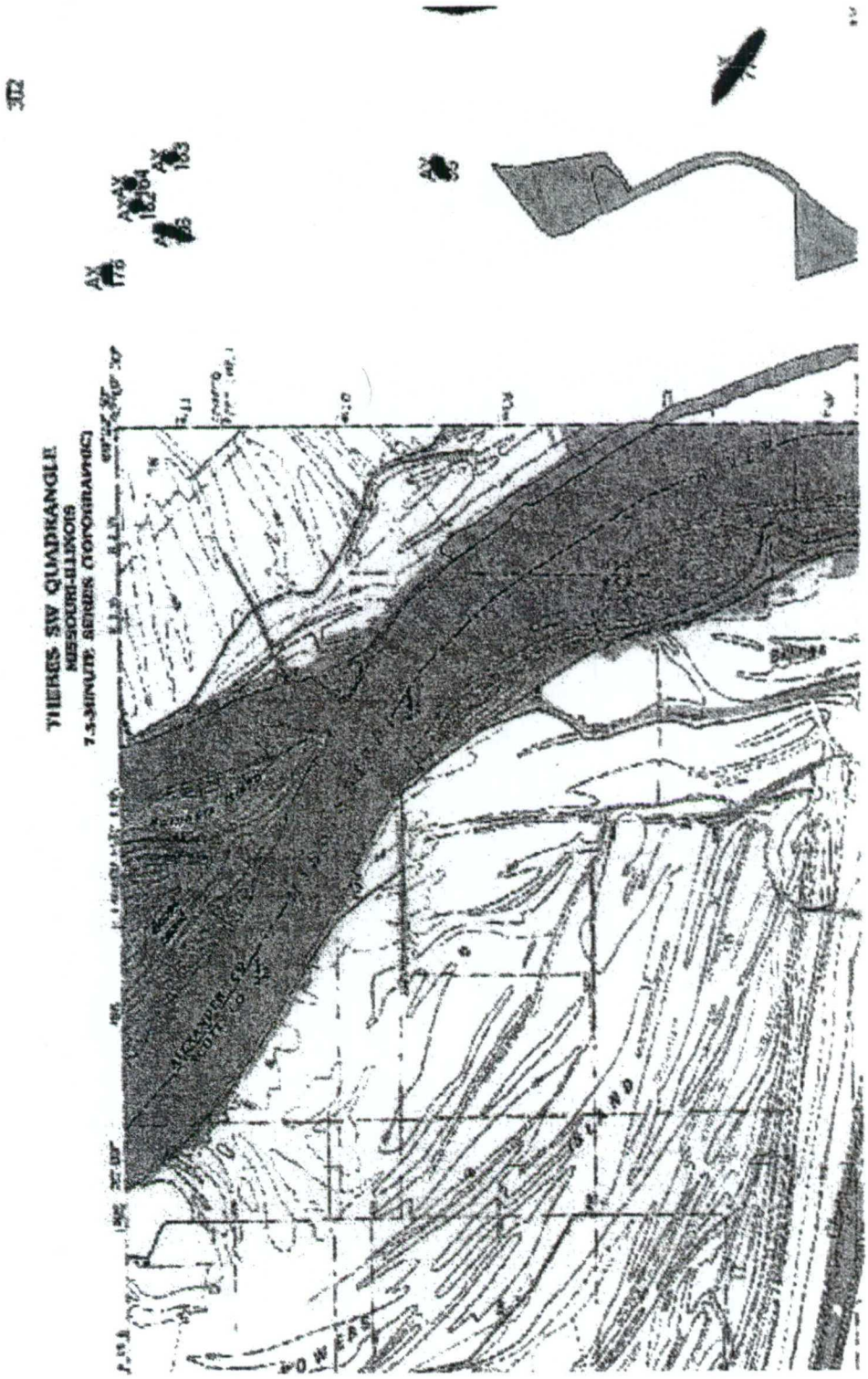
Map 1a. Len Small Proposed Floodway (red), General Project Area, Alexander County, Illinois.



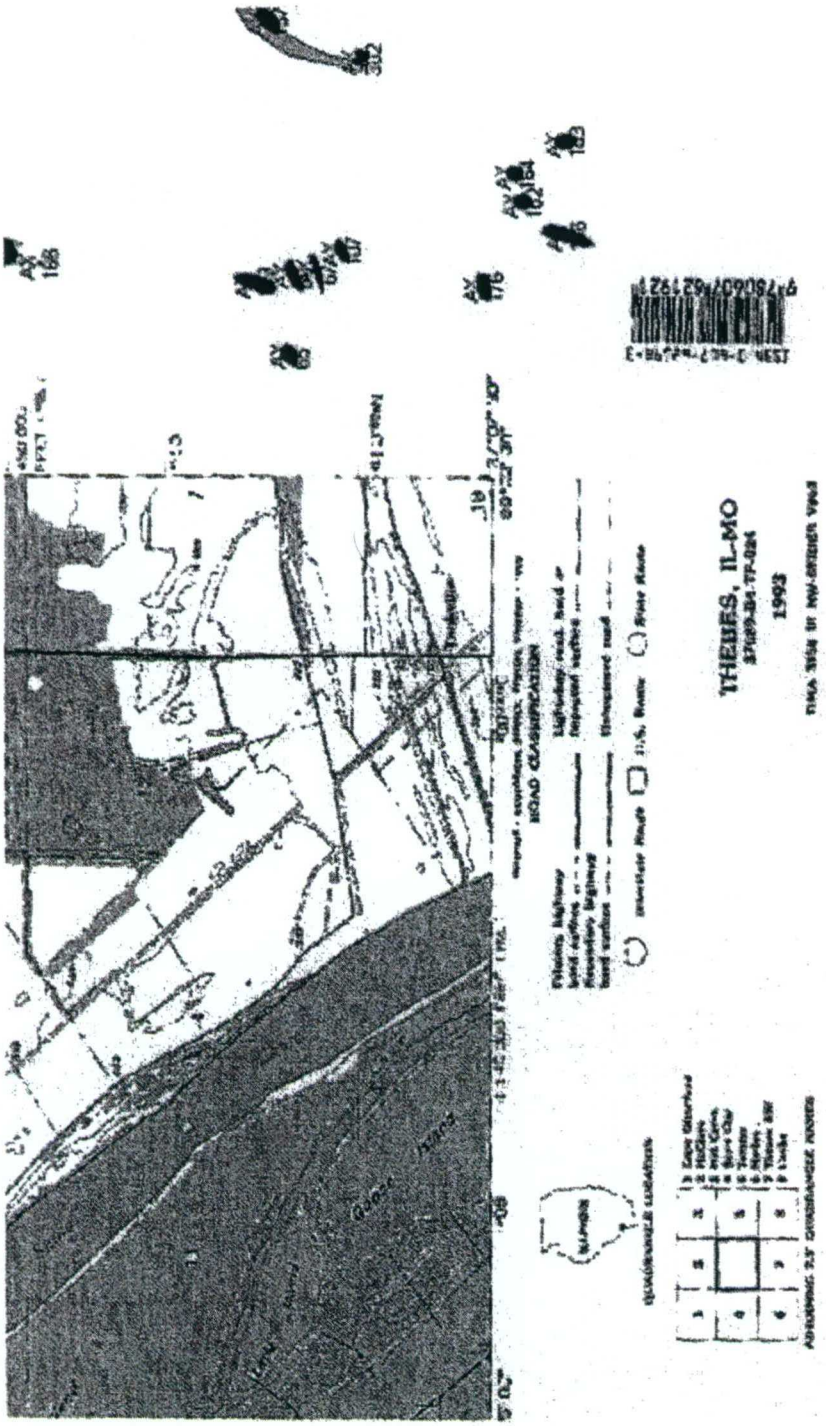
Map 1b. Len Small Proposed Floodway Showing High Ground (terrace) and Low Ground (natural) Floodway. (From Stephens 1995: Figure 2-2)



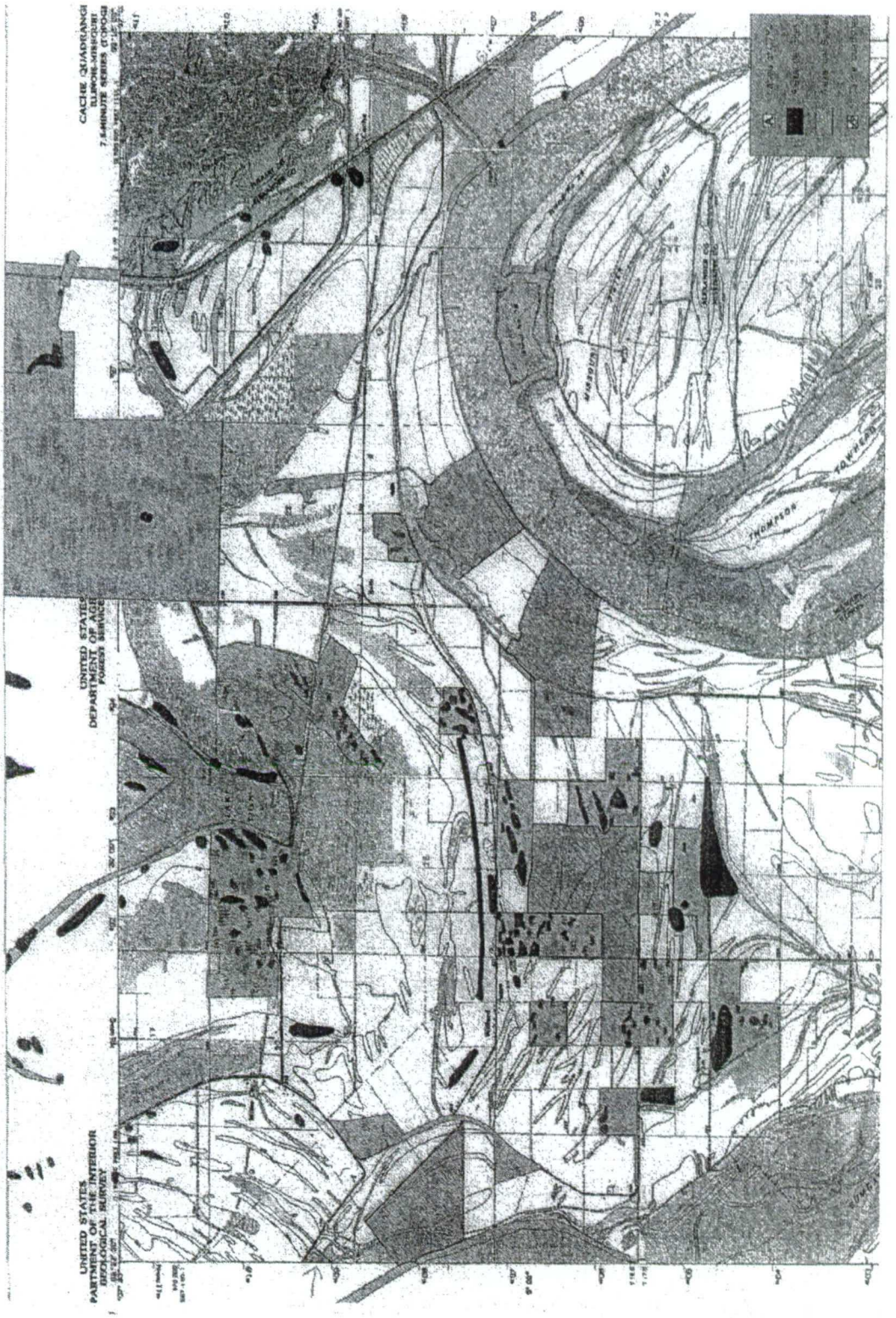
Map 2a. **Len Small Proposed Floodway, Portion of Cache 7.5' Quadrangle showing known archaeological sites and previously surveyed areas.**



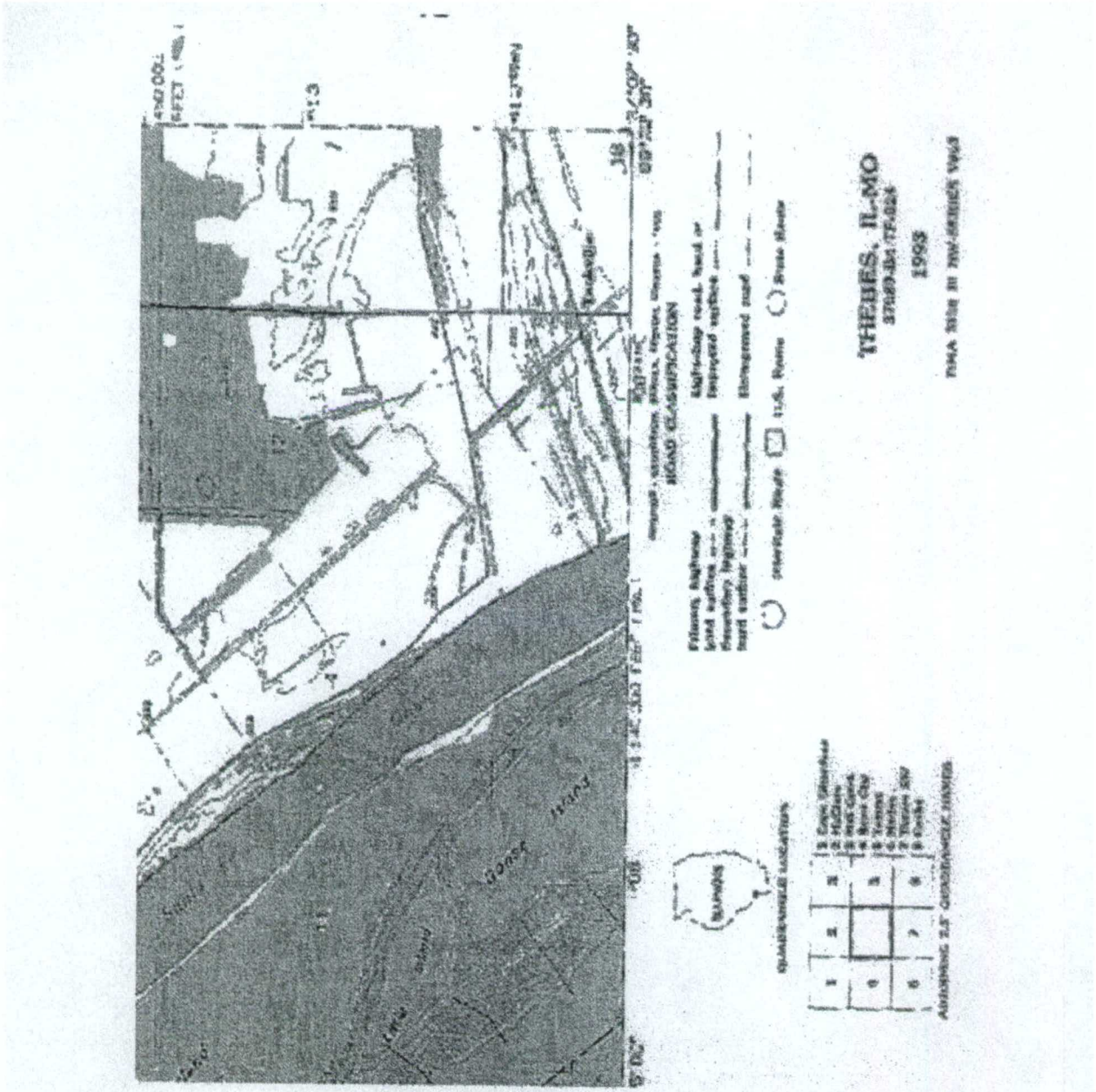
Map 2b. **Len Small Proposed Floodway, portion of Thebes SW Quadrangle showing known archaeological sites and previously surveyed areas.**



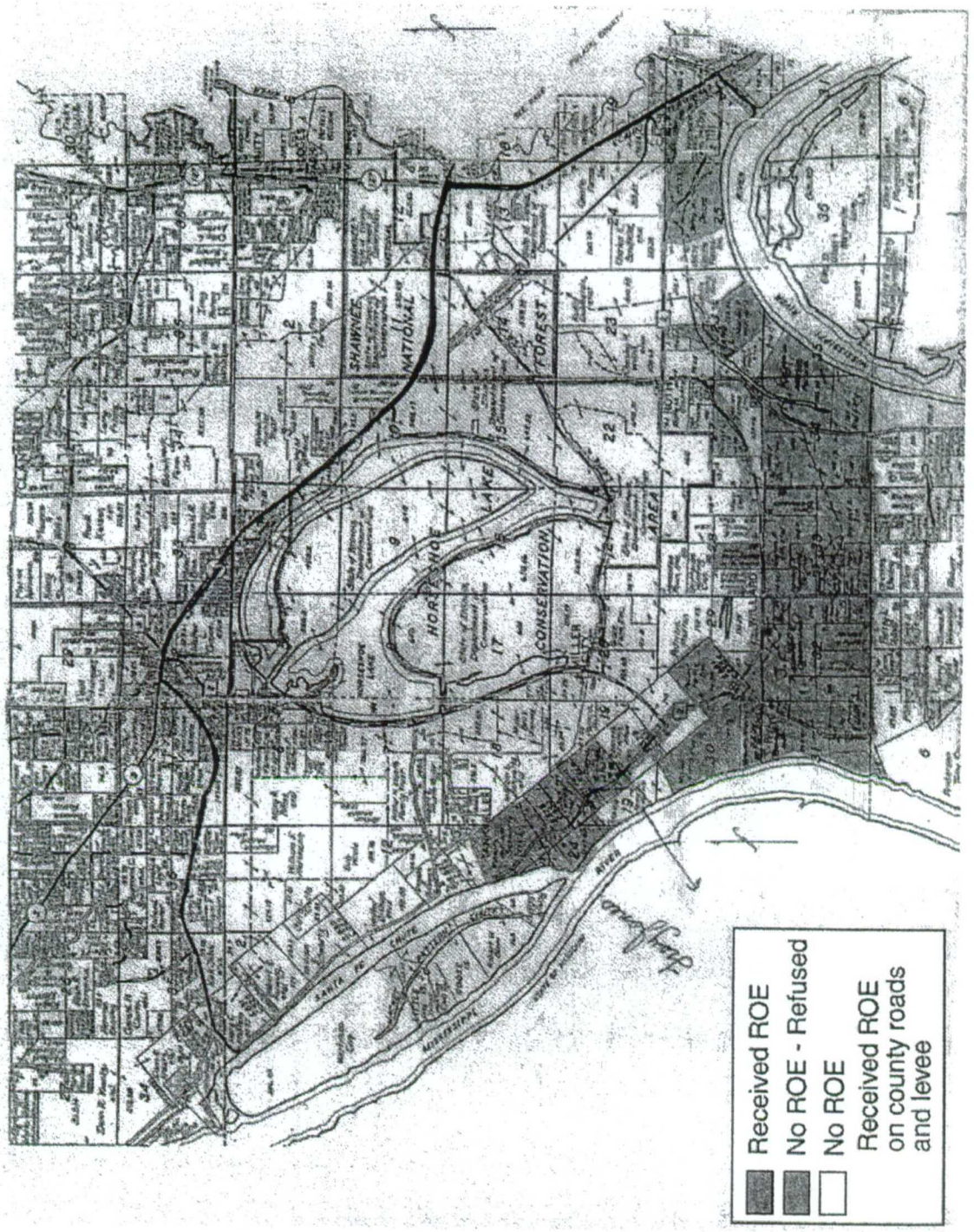
Map 2c. **Len Small Proposed Floodway, potion of Thebes, IL-MO Quadrangle showing known archaeological sites and previously surveyed areas.**



Map 4a-1. Len Small Proposed Floodway, Cache Quadrangle, Areas to be Surveyed for Archaeological Sites (light blue hatch).



Map 4a-2. Len Small Proposed Floodway, Thebes SW Quadrangle, Areas to be Surveyed for Archaeological Sites (light blue hatch).



Map 5a. Len Small Proposed Floodway Property Rights of Entry (ROE) for archaeological survey.

· Table 4.b.2: Len Small Proposed Floodway, Locations of Archaeological Sites to be Revisited

Site Number		Legal Location				UTM Location (Zone 16)	
IAS No. (11AX)	SIUC No. (24D3)	Quarters	Section	Township	Range	North	East
79	53	SW SW NE NW	26	16S	2W	4107899	295434
80	?	SW NE NW	26	16S	2W	4107831	295365
81	55	SW SE SE NW NW NE NE SW	34	16S	2W	4105890	293917
341	344	SW SE NE NW NW NE SE NW	26	16S	2W	4107860	295568
342	345	SE NE SE NW	34	16S	2W	4106228	294052
361	257H	SW SW SW	34	16S	2W	4105218	293332
362	258H	SE SW SW	34	16S	2W	4105194	293604
363	259H	SW SW SW	34	16S	2W	4105302	293286
364	260	S1/2 NE SE NW SE SE SE NW SE	33	16S	2W	4105626	292974
368	264	NE NE SE NW NE SE	33	16S	2W	4105835	293034
369	265	SE NE NW SW NW NE	33	16S	2W	4106526	292492
375	271H	NW SW NW	33	16S	2W	4106400	291747
376	272	SW NW NW	33	16S	2W	4106536	291756
377	273	NE SW NW NW SW NW	33	16S	2W	4106322	291931
379	275	SE NW NW	33	16S	2W	4106455	291903
380	276	NE SW NW	33	16S	2W	4106427	292020
410	310	NW SE SE	33	16S	2W	4105505	292895
411	311	NW SE SE NE SE SE SW SE SE SE SE SE	33	16S	2W	4105423	293079
412	312H	SW SE SE	33	16S	2W	4105229	292984
417	317F	SE SW NW	33	16S	2W	4106059	292012
418	318	SE SW NW	33	16S	2W	4106234	291956
419	319	SE SW NW	33	16S	2W	4106212	292044
420	320	NE NW SW	33	16S	2W	4105973	291987
422	322F	NW NW SW	33	16S	2W	4105958	291770
423	323	SE SW NW SW SW NW	33	16S	2W	4106052	291870
425	325	SW NW SW	33	16S	2W	4105827	291721
426	326	SW NW SW	33	16S	2W	4105738	291817
437	337H	NW SW SW	34	16S	2W	4105498	293311
427*	327	NW NE NE	5	17S	2W	4105192	291359
429*	329F	NW NE NE	5	17S	2W	4105198	291434

*These sites may extend into the survey area.
Note: Information supplied by Illinois State Museum and Southern Illinois University-Carbondale. Not field verified by U.S. Army Corps of Engineers.

Table 4.a. December 17, 2003

Len Small Proposed Floodway, Landowner Survey Parcel Acreage

LANDOWNER	PARCEL ACREAGE				TOTAL
Darold Billings	50				50
Charles Bonifield	32				32
Edward Bonifield	32	40	2*		74
C & W Farm Supply	37				37
Marion Farris	242	20			262
Forrest Ice	40	40	80		160
James Ice	40	5*	5*	40	90
Robert Pecord	203				203
Mary Powless	43	70			113
Robert & William Swartz	90				90
Marion Williams	223				223
TOTAL					**1334**

* Levee north side, extends 100 feet beyond highway right of way

APPENDIX E
ILLINOIS HISTORIC PRESERVATION AGENCY
LETTER OF AGREEMENT

Illinois Historic Preservation Agency

1 Old State Capitol Plaza • Springfield, Illinois 62701-1507 • Voice (217) 782-4836 • Teletypewriter Only (217) 524-7128

Alexander County PLEASE REFER TO: IHPA LOG #031101404
Cairo
Mississippi River Mile 14 - 34/Len Small Floodway in Dogtooth Bend

COESTL-DACW66-01-D-0003/DO#0022
Overflow Floodway Study

December 10, 2004

Mr. Christopher B. Pulliam
Department of the Army
ATTN: CEMVS-ED-Z (Pulliam)
St. Louis Distruct, Corps of Engineers
1222 Spruce Street
St. Louis, MO 63103

Sir:

We have reviewed the report entitled *Archaeological Survey within Designated Portions of the Proposed Len Small Floodway in Dogtooth Bend, Alexander County, Illinois* prepared pursuant to the requirements of section 106 of the National Historic Preservation Act of 1966. In our opinion, the implementation of the proposed Len Small Floodway constitutes an adverse effect on historic properties identified in the report in accordance with the definition contained in 36 CRF 800, Protection of Historic Properties. Therefore, it will be necessary to initiate consultation with our office in conformance with these regulations to arrive at a Memorandum of Agreement that will take into account the effects of the project on historic properties.

Sincerely,

Anne E. Haaker

Anne E. Haaker
Deputy State Historic
Preservation Officer

AEH

DEPARTMENT OF THE ARMY
ST. LOUIS DISTRICT, CORPS OF ENGINEERS
1222 SPRUCE STREET
ST. LOUIS, MISSOURI 63103-2833

REPLY TO
ATTENTION OF:

October 12, 2004

Engineering Division
Curation and Archives
Analysis Branch

Ms. Anne E. Haaker
Deputy State Historic Preservation Officer
Illinois Historic Preservation Agency
1 Old State Capitol Plaza
Springfield, Illinois 62701-1507

Dear Ms. Haaker:

Pursuant to the National Historic Preservation Act, Section 106 (as amended), and its implementing regulation 36 CFR 800, the St. Louis District, U. S. Army Corps of Engineers, hereby provides the Illinois State Historic Preservation Officer (ISHPO) with two copies of the following draft report for review and comment: "Archeological Survey within Designated Portions of the Proposed Len Small Floodway in Dogtooth Bend, Alexander County, Illinois," by Eric S. Albertson, C. Andrew Buchner, Randal T. Cox, and Arlene A. Hill, Panamerican Consultants, Inc. (PCI), 15 South Idlewild Street, Memphis, Tennessee, 38104. The scope of work for this survey was e-mailed to Mr. Joseph Phillippe of your staff on December 18, 2003, and we received no comment.

The Len Small project is in the feasibility (study) phase, and the St. Louis District is preparing a decision document to determine the recommended plan. The proposed Len Small floodway in Alexander County would be the Illinois portion of the larger Mississippi River & Tributaries (MR&T) Commerce to Birds-Point Levee project also located in Scott County, Missouri. As one alternative of the Len Small study, the St. Louis District is considering constructing an overflow floodway traversing the Dogtooth Bend peninsula. Dogtooth Bend is a large meander loop of the Mississippi River located between about river mile 14 and 34 upstream from the confluence of the Ohio and Mississippi Rivers at Cairo, Illinois. During high water, such as in 1993, Mississippi River floodwater flowed across the neck of the meander.

While developing the recommended plan, the St. Louis District decided an archaeological survey of a portion of the possible project area would be useful in determining what archaeological resources are, or may, be present. Southern Illinois University-Carbondale had conducted an archaeological survey in 1993, and the present investigation builds on that work. The phase I archaeological survey and geomorphological survey were conducted through an existing contract (DACW66-01-D-0003, Delivery Order No. 22) between the Memphis District, U. S. Army Corps of

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Engineers and PCI. Since the project is located on private land, investigations were limited to those areas for which landowner permission was granted.

PCI surveyed a total of 1294 acres (524 hectares). The original survey area was 1334 acres (540 hectares), but the tenant denied access to one 40-acre (16 hectares) tract. PCI investigated portions of a mile-wide floodway, although the actual floodway, if built, will likely be reduced to three-quarters of a mile wide to avoid several potentially eligible archaeological sites on the north side. Of the 78 archaeological sites and isolated finds discussed in the report, 46 sites had not been previously reported (four site were probably previously reported sites to which Illinois State Museum [ISM] assigned new numbers). The remaining 32 sites had been previously reported: Thirteen sites were revisited, eight sites could not be found and had apparently been destroyed, and 11 sites were inaccessible for various reasons. Please note that the PCI site Field Number (FN) 2 incorporated five lithic scatters previously recorded as individual sites. The ISM declined to combine the sites without further investigation, so FN 2 is tabulated here as the five originally defined sites. Of the total 78 sites, 19 sites were recommended as potentially eligible for National Register of Historic Places (NRHP) listing (including the historic period Lake Milligan Cemetery), 48 were recommended as ineligible, and 11 will require revisits.

Based on the findings of the draft report and further consultation with PCI, the St. Louis District has made the following determinations and recommendations.

1. The following 18 sites may be eligible for listing on the NRHP, and any sites that may be impacted by the project once it is designed are recommended for Phase II eligibility testing and mitigation, if appropriate, prior to construction. Only eight of the following sites (11AX341, 11AX 361, 11AX368, 11AX412, 11AX579, 11AX602, 11AX603, 11AX608) are inside the proposed three-quarter-mile-wide floodway.

11AX100	FN-2:	11AX579
11AX341	11AX 93	11AX594
11AX361	11AX385	11 AX595– 11AX591
11AX368	11AX386	11AX597
11AX412	11AX388	11AX602
	11AX390	11AX603
		11AX608 (was 79)*

*ISM assigned new site numbers because new locations were slightly different than ones plotted in 1993. The contractor concluded that the artifacts possibly were moved by 1993 floodwaters or the original site location may have been plotted wrong.

2. The historic period Lake Milligan Cemetery (11AX437) is likely eligible for listing on the National Register of Historic Places, but its final deposition will be as an historic cemetery.

3. The following 40 sites have been determined ineligible for listing on the National Register of Historic Places due to lack of important data producing potential and low integrity.

11AX375	11AX570	11AX580	11AX590	11AX600
11AX376	11AX571	11AX581	11AX592	11AX601
11AX563 (was 420)*	11AX572 (was 410)*	11AX582 (was 380)*	11AX593	11AX604
11AX564	11AX573	11AX583	11AX596	11AX605
11AX565	11AX574	11AX584	11AX598	11AX606
11AX566	11AX575	11AX585	11AX599	11AX607 (was 80)*
11AX567	11AX576	11AX586		
11AX568	11AX577	11AX587		
11AX569	11AX578	11AX588		
		11AX589		

4. The following eight previously reported sites have been determined ineligible for listing on the National Register of Historic Places because they could not be found during the revisit and appear to have been destroyed or may have been completely collected in 1993.

11AX 81	11AX439
11AX342	11AX417 inundated frequently
11AX364 surface erosion	11AX422 inundated frequently
11AX369	
11AX379	

5. The following 11 previously reported sites could not be revisited either due to sand deposits or lack of permission, and they will be surveyed in the future.

11AX362	11AX423
11AX363	11AX425
11AX377	11AX426
11AX411	11AX427 lack of permission
11AX418	11AX429 lack of permission
11AX419	

The St. Louis District requests your concurrence with our determinations that the 19 sites listed above (1 and 2) are potentially eligible for NRHP and should be tested prior to any future construction and that the 48 sites listed above (3 and 4) are ineligible for NRHP listing. Any comments should be sent to me at the following address.

U.S. Army Corps of Engineers
St. Louis District
ATTN: CEMVS-ED-Z (Pulliam)
1222 Spruce Street
St. Louis, Missouri 63103-2833

If you have any questions about this issue, please contact Ms. Suzanne E. Harris of my staff at (314) 331-8467 or e-mail Ms. Harris at suzanne.e.harris@mvs02.usace.army.mil.

Sincerely,

Christopher B. Pulliam
Acting Chief, Curation and Archives
Analysis Branch

Enclosures